Lumleian Lectures
ON
THE CONVULSIVE DISEASES OF WOMEN.

Delivered at the Royal College of Physicians,

BY ROBERT BARNES, M.D. LOND.,
OBSTETRIC PHYSICIAN TO ST. THOMAS'S HOSPITAL.

LECTURE III.—PART I.

Convulsive diseases in the non-pregnant state—The ovaries are in the ascendant—Menstruation compared with pregnancy—Increased nervous tension—Ovarian epilepsy—Influence of dysmenorrhœa, of pain, of blood-degradation, of inherited diathesis—Neuralgia—Hysteria presupposes an antecedent diathesis—Influence of the mind, of habit, and emotion—Climacteric convulsive diseases—Epilepsy—Influence of phosphatic and uric acid accumulation, of alcoholism—The psychical phenomena—The treatment of convulsive diseases: four cardinal principles—The induction of labour discussed—Induction of anæsthesia—Bleeding—Transfusion.

MR. PRESIDENT AND GENTLEMEN,—We have dwelt in some detail upon the convulsive diseases induced by pregnancy, labour, and the puerperal state, because these supply the most striking types, and illustrate the most forcibly the subject-matter of our theme. The types being determined, we shall be able to deal more rapidly with the convulsive diseases as they occur apart from the conditions of pregnancy.

The nervous system is still dominated by the sexual system. During pregnancy, the seat of the highest vascular activity is the uterus; the ovaries and breasts are greatly, though not absolutely, in abeyance. During lactation, the breasts exert, or should exert, the supremacy; but, as we have seen, the ovaries are constantly striving to regain the predominance of which they have been temporarily deprived.

When lactation is over, the reign of the ovaries is undisputed. And this is especially true in women who have never been pregnant. The uterus, indeed, responds to the periodical work of ovulation, undergoing certain remarkable changes; and the breasts feel the influence of the stimulus; but the manner in which they are affected is entirely sympathetic, or secondary upon the lead of the ovaries. Still, we may trace very plainly, in the changes undergone during menstruation, a cyclical succession of action analogous to what is observed in the history of pregnancy. Ovulation, or cotocia, the work of the ovaries, is the first in order; menstruation, or the discharge of blood from the uterus, is the second phenomenon; turgescence of the breasts is the third. Everything is prepared. Should the male element arrive, there is a mature ovum ready for impregnation; there is a uterus gorged with blood, with a mucous membrane developed into a decidua, to furnish a nidus for the ovum; there are the breasts turgid and ready to secrete milk, should the occasion arise. But for want of the necessary or "fortuitous concourse of atoms," the ovum decays, and all the organs subside into quiescence. This cyclical process, then, bears a close resemblance to pregnancy. Menstruation may be likened, by a not very violent figure of speech, to an abortion. It is a missed or disappointed pregnancy. Such as it is, it involves the same changes in the vascular and nervous systems, up to a certain point, as does pregnancy itself. The rapid afflux or diversion of blood to the uterus, and the structural change set up in it, determined by ovulation, imply a correlative activity of the spinal cord. There is the increased nervous tension provided for a specific purpose; and, in most cases, probably this tension is even greater than the mere transitory work a missed pregnancy requires. There is an excess, often a great excess, of nervous tension provided in anticipation of the possible consummation. Hence, the intense excitement of the whole organism, the turbulence of the nervous phenomena often witnessed at the menstrual epochs.

Such phenomena, then, as we have seen to take place during pregnancy, we may expect to find reproduced during menstruation. And this deduction is amply justified by clinical experience. The chief point of difference lies in the fact that menstruation does not occasion those marked changes in the constitution of the blood which play so important a part in the history of pregnancy. We may, then, expect to find in connexion with pregnancy the more purely reflex nervous phenomena, minus especially the eclampsia which is so intimately dependent upon uræmia.

Of these, epilepsy is the first I will recall to our attention. It is not necessary to dwell long upon this form of convulsion. Its frequent evocation by menstruation is familiarly known. Its first appearance has been too often associated with the first menstruation, or with the early struggles of the ovary to carry out its function, to permit of any doubt as to the influence at work. In sound health, the generative organs being well formed, the function of menstruation is performed without difficulty; there is a well-balanced relation between nervous energy and the work to be done. There is no commotion. But introduce any one of several conditions, and the nice balance is destroyed; some morbid phenomena will almost certainly appear. It may with truth be asserted that, even in the healthiest women, there is evidence of exalted nervous action under the influence of menstruation. In most instances the struggling nervous power is confined within physiological limits, or is controlled by the will. But suppose—and the case is a frequent one—the importation of a disturbing element in the form of struma, or of some subtle modification of structure derived from ancestral peculiarity; and the nervous system will react in abnormal degree and manner under the physiological stimulus.

Or take the case of obstructed or morbid menstruation. Here there will be excess of irritation, importation of the element of pain, both together tending to exhaust the nervous energy, or to scatter it in abnormal directions.

Under either of these conditions, a fit of epilepsy or of hysteria, according to the constitution of the patient, may explode. If the organic predisposition be strong, such a fit may break out under the simple irritation proceeding from the ovaries, and their appendage, the uterus. That is, it does not appear to be necessary to postulate an attendant unhealthy condition of the blood, although such condition is so frequently present at the onset of menstruation.

But there are many cases in which the due manifestation or action of nerve-force is not conspicuously disturbed under the first trial. There is more or less resisting power, which we may suppose to depend upon a less decided organic defect or taint of the nervous centres. Hence, the latent proclivity to nervous aberration will only be brought out under repeated irritation. And the repeated irritation, arising from periodical pain and obstructed function, hardly ever fails to induce appreciable depravation of the blood. There can be no doubt that this new factor operates most powerfully in provoking the outburst of nervous disorder. Probably the depraved blood, partly by its negative qualities, partly by its positive qualities, so modifies the nutrition of the nerve-substance that a morbid diathesis may be created, as in the case of syphilis; or developed, as in the case of latent hereditary taint. Certain it is that in many cases blood-disorder comes in to play an important part in the production of epilepsy and hysteria. Where the original proclivity to nervous disorder is not so great that the nervous centres yield at once, the assailing power, the ovario-uterine irritation, takes the citadel by slower approaches, gradually starving, exhausting, and degrading the nervous centres. It carries on the assault by the twofold operation of sapping the resisting power and of continually renewing the attack. Under these combined influences, nervous structure, originally but slightly affected, will in the end break down. Of this the examples supplied by the history of dysmenorrhœa are plentiful. Dysmenorrhœa commonly includes two factors. There is first, in many instances, difficulty in the performance of the proper ovarian function, mal-ovulation, or, to coin a more expressive term, *dysotecia*. This is a prime cause of pain. The other factor is the disturbance in the secretion and excretion of the menstrual blood, the proper function of the uterus. Impeded secretion and excretion almost infallibly entails disorder in the quantity of the discharge. Menorrhagia is a frequent attendant upon dysmenorrhœa; and in many other cases the flow is deficient. But there is another condition which has attracted less attention, but which is not

less real. Dysmenorrhœa, in a large proportion of cases, implies retention of some portion of the secreted blood in the cavity of the uterus. This adds uterine pain to ovarian pain, doubling the force of the irritation, and introducing a new element of blood-impairment. Retained blood is liable to undergo a degree of decomposition, and hence to be a source of toxæmia. Thus we may have, and very frequently do have, as the consequence of dysmenorrhœa, a double degradation of blood going on, through hæmorrhage or loss, on the one hand, and through empoisonment by absorption of foul matter, on the other.

Todd said no nervous disorder is more certainly due to blood-disorder than hysteria; and Briquet says the influence of defective hæmatosis over the nervous susceptibility is nowhere more evident than in the action which chlorosis exerts over the economy, and in the predisposition to hysteria which results from this action. Out of 430 hysterical patients he found 152 in whom chlorosis existed in a marked manner before the appearance of hysteria. This is quite true so long as we regard the blood-disorder as simply a provoking cause.

The like explanation or statement will apply with equal point to neuralgia, which, in the large majority of cases in women, is produced by dysmenorrhœa and other ovario-uterine disorders attended by pain and exhausting discharges, which induce degradation of the blood and therefore morbid nutrition of the nervous centres, and increased susceptibility to external impressions.

I do not profess in this place to discuss the various theories that have been advanced as to the nature or causes of hysteria. I shall content myself with expressing the opinion that the underlying essential cause is an inherent organic condition, constituting what may be called the hysterical constitution, just as we have an epileptic constitution. It may be, as some have conjectured, that there is a peculiar nervous temperament out of which may be developed epilepsy, hysteria, chorea, or insanity; the particular form the nervous disorder may assume being determined by accidental circumstances. But of this I am not convinced. I see epileptics who are quite free from hysteria and *vice versâ*. What we are most concerned with is, to know that, howsoever obscure the intimate physical condition upon which these nervous disorders depend, these disorders may never become manifest; in short, may have no other than a potential existence, unless certain new conditions be introduced. These new or adventitious conditions are not necessarily inherent in the system. If they be warded off, or removed when they have effected a footing, the nervous disorders are averted, or may be cured. This means that we must direct at least a large part of our remedial forces, not against the nervous disorder, the hysteria, or the neuralgia, for example, as if it were a self-supporting morbid entity, but against the accidental and removable, exciting or maintaining, causes. Where we cannot discover such causes, or where we fail to dislodge them, we may be reduced to treat the epilepsy, hysteria, or neuralgia as a disease; treating them, in fact, as we do syphilis by means of so-called specifics.

It is not much to the purpose to tell us, as some physicians who neglect the study of the diseases of the female generative organs do, that hysteria, for example, is a disease of the brain, and is not dependent upon disease of the ovaries or uterus. So long as they refuse to apply to these organs similar methods of precise observation to those which modern science applies to the study of the other organs, they cannot be credited with the knowledge necessary to give authority to their assertion. They may treat the brain, they may strive to restore the blood to soundness, to bring the digestive organs into order. All this they may do with about as much success as is achieved in keeping a leaky boat afloat by baling out the water, taking no heed of the leak. It is like the labour of the Danaids.

If it be true that dysmenorrhœa, menorrhagia, leucorrhœa, and other ovario-uterine disorders lead to blood-disorder which so often precedes the outbreak of convulsive and other nervous diseases, it follows logically that we ought to begin by removing, if we can, these debilitating and irritating causes. By doing this we may often succeed in restoring the nervous system to the *status quo ante morbum*; thus proving the correctness of the observation that the utero-ovarian diseases produced the nervous disorders.

But whilst I dispute the doctrine that hysteria is an affection of the brain or of the mind, it is impossible to deny that the mind has a great influence, if not in the initiation of the disease, at any rate in provoking attacks and in aggravating them. It is, however, a grievous error to regard this influence as more than subordinate and secondary. It is rarely until the nervous system has been broken down by illness of some duration that we see those apparently perverse and perplexing mental aberrations which so often make hysteria the puzzle and opprobrium of medicine.

In the great majority of instances, at the beginning, the subject struggles resolutely against the hysteric explosion. But by and by, when through continued assaults the resisting power has become impaired, the mind is also weakened, and then it may be said to go over to the enemy and to help in the outbreak of hysteric attacks. This reciprocal influence, this action in a vicious circle or alternation of the brain and spinal cord, is just what we have seen to hold good in chorea, in epilepsy, in vomiting, and, in fact, in all convulsive diseases. Those most distressing cases where the erotic element becomes a part of the hysterical fit are no real exceptions. The chief difference between these cases and those of ordinary hysteria lies in the greater gravity of the original nervous diathesis. Their close connexion with insanity has often been noticed. Not a few of these cases culminate in mania; and in all of them there is a substratum of mental disease which, howsoever anxiously we may try to ignore it, will probably declare itself sooner or later.

In hysteria, the influence of habit and of emotion is pretty sure to make itself felt after a certain time. This influence it is which generally accounts for the departure from periodicity which is often observed when hysteria, epilepsy, and neuralgia have become chronic. When the blood has become degraded and the nervous centres weakened under the protracted operation of the morbid factors, the attack is brought on by very much slighter causes than were necessary at the beginning. Hence it is that, after a while, a slight emotion, even moderate fatigue, gastric disorder, may excite an attack at almost any moment. But still the menstrual epoch is the period of greatest susceptibility. And I must here observe that in some cases, where periodicity appears to be the most utterly lost, the influence of ovulation is still the immediate exciting cause. It must be remembered that ovulation is a distinct function from that of menstruation. Menstruation is the outward indication of the ovarian process; but it is not a necessary consequence. It is not always coincident in time. It may not take place at all. The ovarian nisus may begin a week or more before the menstrual flow. And it is the ovarian nisus which is the chief cause of the central nervous erethism, and which at the same time supplies the centripetal irritation. This is no *petitio principii* invoked to bring apparent exceptions within a general law. There are abundant facts to prove this proposition, familiar enough to those who observe closely the phenomena of the ovario-uterine functions.

The periodical action of the ovarian nisus is frequently observed in the arousing or exacerbation of mania, delusions, and other insane phenomena, in the inmates of lunatic asylums.

Climacteric convulsive diseases.—At the "turn of life," when the ovario-uterine functions are ceasing, the nervous system, it is well known, exhibits frequent and various perturbations. Thus we find giddiness, vertigo, actual syncope, a pseudo-paralysis marked by numbness and comparative loss of power of one side, impairment of memory, mental irritability, restlessness, culminating in some cases, especially where the nervous diathesis exists, in epilepsy, and even in insanity. Probably few women pass through this epoch without some nervous perturbation. It is a stage of transition and of trial for all. Vertigo, some degree of loss of memory, some disposition to utter *mal-a-propos*, to use the wrong syllable or word, some sense of distrust in the power of self-control, are extremely common. These perturbations may persist for months, even for years, before the balance is restored. During a great part at least of this transition period the ovarian influence may be traced. There is more or less periodicity in the nervous disorder; and when the uterus and ovaries have undergone complete senile involution or atrophy, when all menstrual discharges have ceased, these disorders commonly subside or change their character.

The climacteric perturbation is often even more severe and more marked than what is observed at any previous period of life. Thus many women may have passed through the trials of puberty and of child-bearing without serious nervous disorder, and will break down at the menopause. Often, no doubt, this is the climax, the last ounce of a long-troubled sexual life. Exhausting labours, consequent uterine disease, the cares incident to the rearing of a family, tell at last, so that when the irregular and futile efforts which mark the close of sexual life are made, the nerve-force, missing its proper destination, breaks out in various aberrations. These nervous aberrations commonly entail irregular deviations from the proper order of the blood-distribution, as well as alterations in the quality of the blood. That menstruation exerts a depurating action on the blood is an old idea. I believe it is a correct one. At any rate, when there is no longer a normal attraction or afflux of blood to the pelvic organs, the subject becomes liable to irregular determinations of blood to the head.

I have already said that I cannot here undertake to enter upon a critical discussion of the theories of the pathogeny of convulsion. But I may venture to repeat that clinical observation of the phases and conditions of climacteric epilepsy, or of those of puerperal eclampsia, lends little support to the doctrine that it is the result of anæmia. On the contrary, in many cases, epileptic fits occur in florid, robust women, who make blood fast, and that just at the times when the circulation may be said to be in the state of highest tension—that is, under the excitement of a menstrual nisus. In a certain proportion of these cases actual extravasation of blood from the cerebral vessels—apoplexy—takes place. In another group of cases, it is true, the evidence of plethora is wanting. The vessels may be over-full, but the blood is watery, deficient in red globules. In these cases it may, with more semblance of exactness, be said that the condition of epilepsy is anæmia. In a third group, the blood may or may not be deficient in red globules, but it is obviously charged with noxious matter. About the climacteric the aberrant nervous distribution is attended by disorder of digestion, by disordered or obstructed secretion and excretion. The unsteady brain favours the general disposition to physical inertia. Want of exercise increases the sluggishness of the great depurating organs. The liver, the kidneys, the intestinal canal, the lungs, the skin acting imperfectly, allow the products of tissue-waste and of the mal-assimilated excess of food to accumulate in the circulation. This is marked by the urine becoming loaded with phosphates, and sometimes with uric acid. In some cases, which I have had special opportunities of watching closely, the outbreak of a fit of convulsion had been preceded by more than usual accumulation of phosphatic matter and of uric acid. It is interesting to remember that uric-acid crystals are not seldom found in the urine and in the blood in the albuminuria of pregnancy. I am not aware of any distinct evidence in support of the conjecture that uric acid, as such, is the exciting cause of convulsion. And I am not prepared to accept the doctrine of Frerichs that the cause is ammonia resulting from the decomposition of urea. I venture to submit—pretending to no recondite skill in humoral chemistry—that, until more precise correlative chemical and clinical investigations have been made, it is wiser to be content with the general conclusion that the poisonous convulsion-provoking element cannot be specified; but that it is to be found amongst the products that ought to be excreted through the agency of the lungs and glandular system.

In rather a large proportion of cases, including not a few in which the climacteric has not been reached, this loading of the urine with phosphates and uric acid is greatly occasioned, or increased, by the habit of resorting to stimulants. In these cases, vomiting is a frequent complication; and in subjects, not specially prone to epilepsy, constituting the chief nervous disorder. Occasionally albuminuria even is caused by the combination of alcoholism and phosphatic accumulation; and it may persist so long as to give ground for concluding that it depends upon permanent Bright's disease. But I have seen it vanish rapidly when alcohol was cut off, and when the glandular system was set to work; the nervous symptoms subsiding simultaneously.

In this class of cases may be easily traced the influence of the mind, of the emotions, in the evolution of convulsion. Or perhaps it might be more correct in some cases to say that the poisoned blood takes effect first upon the brain, inducing disorder of the intellect, and that thus it becomes a more ready irritant of the spinal cord. In many cases of hysteria and of epilepsy the fit is preceded for several hours, for a day or more, by a strange alteration in the mind. The patient exhibits unwonted excitement, passion, suspicion, is irrepressibly loquacious, perhaps violent in action, complains of intense headache; she is, in fact, for the time beside herself. It is quite certain that perception is disordered, and the faculty of Comparison suspended. The apparent untruthfulness of patients of this class is often a source of pain to those about them. In some cases this untruthfulness is real. There is no saying more questionable than the topers' maxim, "In vino veritas." Alcohol is too often the enemy of Truth. And this is never more clearly seen than in the conduct of those who have become the slaves of drink. But I refer to this subject for the purpose of offering a different explanation, which I am sure applies to many cases. The untruthfulness is apparent. There is untruth in reference to facts; but there may be no untruth if reference be made to the patient's own impressions. Under the mental perturbation of an impending fit, a state compounded of vertigo and delirium, the senses are subject to illusions, perception is distorted, and the false impressions are often crystallised as delusions, and so indelibly engraven on the memory. Something similar I am certain often occurs in persons whose faculties are impaired under the combined influence of nervous disease and the abuse of stimulants. I have seen persons who on recovering from the disease and the associated alcoholism have no longer shown any tendency to falsehood.

ON PARALYSIS, CONVULSION, AND OTHER NERVOUS AFFECTIONS IN SYPHILITIC SUBJECTS.

BY THOMAS BUZZARD, M.D.,
PHYSICIAN TO THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

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AFFECTIONS of intelligence, transitory or permanent, constitute some of the most important features of intra-cranial syphilis. It is not at all uncommon, in cases of comparatively early date, to find in association with paralysis of one or more cranial nerves or of the limbs on one side of the body, either a restlessness and excitability which are almost maniacal in character, or a condition of more or less prolonged stupor. In later cases, where repeated attacks of paralysis or convulsion during some years have given evidence of extensive cerebral disorganisation, conditions allied to paralytic dementia or to what is termed "general paralysis of the insane" are more common. In the first class it is probable that the membranes immediately investing the brain are the seat of inflammation; in the second, the brain-substance itself has suffered, either by inflammation of its connective tissue, or by interference with its nutrition and consequent softening induced by changes in the cerebral vessels, or by some structural alteration in the cortical layer brought about by the pressure of thickened and adherent membranes. The former condition, provided that suitable treatment is adopted early enough, is remediable and temporary; the latter, although often capable of some amelioration, always leads ere very long to a fatal termination without restoration of the mental faculties. I have selected the following cases as illustrative of these varieties of mental disturbance, although I must allow that the history of some of them leaves it open to objectors to deny that their syphilitic origin is absolutely proved. My reasons for so classing them are briefly these. The age of the patient, the history of syphilitic infection, the absence of indications of other causes (especially in the circulatory apparatus and kidneys) capable of producing the phenomena, the absence of neurotic family history, the mode in which they were influenced, at least temporarily, by specific remedies, and their general resemblance to well-attested cases of other authors in which autopsies have been performed. With the mass of evidence before us which

has been accumulated by such observers as Virchow, Wagner, Ricord, Lancereaux, Wilks, Hughlings Jackson, and others, the time seems to me to have passed for requiring such proof as dissection affords in cases the clinical features of which are alone sufficient to enable us to class them with those in which this proof has been attainable.

In a case of right hemiplegia with aphasia, of syphilitic origin, which was treated by me in the hospital three years ago and published in this journal,* the patient, a young man, showed such symptoms of mental aberration that we had some difficulty in retaining him in the hospital. For the first few days he was at times in a state of the greatest excitement, talking violently of persons injuring him, and occasionally falling for hours into a condition of deep stupor. Under the influence of specific treatment his mental symptoms quickly subsided, and in three months he was also in other respects quite well.

A single man, aged twenty-eight, was brought to the hospital a year ago in a state of great mental confusion. He was suffering from paralysis of the right external rectus muscle and partial paralysis of the left leg, which he could only just lift from the ground. His symptoms dated from six months previously. His friends, who considered him out of his mind, said that he was constantly talking of persons who were either dead or far from England, and holding imaginary conversations with them. He had a large cicatrix of old ulceration on one leg. I placed him upon specific treatment, but before he could commence it he fell into a state of coma which lasted three days. He then began treatment, with immediate and rapidly progressive improvement; and was soon able to inform me, in answer to questions, that six years previously he had been affected with a chancre, which had been followed by eruption on the skin. Under treatment he recovered his usual health in a few weeks.

A gentleman, aged thirty-eight, applied to me with thickness of speech, loss of memory, inability to write letters without numerous mistakes, noise in the ears, and deafness. He had no deficiency in muscular power. There was a history of hard, perhaps excessive, work. His symptoms, he said, had commenced three months previously with "biliousness," recurring every morning, accompanied by vomiting, heaviness, and several times a day a feeling as of blood rushing to his head, giddiness, singing in the ears, pains in the arms and legs, and cramps in his fingers, so that, during the attacks, he could not hold a pen. He never lost his senses. His habits were extremely temperate, and he had no recognisable lesion of the heart, bloodvessels, or kidneys. There was no family neurosis.

As regards his earlier history, it seemed that many years previously (I could not learn the date) he had suffered from syphilitic symptoms, including spots on the face, and bad sore-throat. Not long after this (and ten years before I saw him) he had an attack in which, to use his own description, his mouth was "drawn down on the right side, and he could not speak distinctly." About the same time he suffered from pain in the right eye, and his sight was affected. He remembered that he was said to have iritis, and that he took medicine which made his gums sore. His face was paralysed for three weeks, and it was three or four months before he could speak distinctly. Since then he had enjoyed good health until the attack for which he sought my advice.

I prescribed mercury and iodide for him, and he immediately began to improve. His speech became clearer, he was able to write with but few mistakes, and he lost all the other symptoms of which he had complained. I still, however, noticed something queer in his manner, and his replies to questions were wanting in logical accuracy. After two months' treatment, although I considered his condition as by no means satisfactory, he returned to business, but found himself incapable of continuing it after a few days. I then lost sight of him for five months, during which, I believe, he underwent treatment elsewhere. At the end of that time I was called to see him at his home, and found him in a state of restless excitement, with tremulousness of features and mental delusions. He was by turns tender and affectionate to his family and violently harsh to them. His manner was full of suspicion, and he told me of persons in the house who were following him about, making remarks and laughing at him. It became necessary to send him to an asylum, where he died after ten days, during which he had been extremely violent and had suffered from convulsions.

A clerk, aged forty-six, married six years, applied at the hospital in January, 1872, with imperfect right hemiplegia, occasional incontinence of urine and fæces, and considerable mental disorder. It seemed, from his wife's account, that in November, 1870, he had a succession of fits in one day, which were followed by prostration, and kept him from his employment for a month, when he returned and worked fairly well at his duties. At times, however, he seemed lost, called people by wrong names, and frequently expressed an opinion that "Michael, the paper-man, was flying about his head, and making him ill." In the December and January following he suffered very much from pain coming on night after night in his head. In July, 1871, he had another batch of fits, ten in number, and it was a month before he rallied and became quite conscious. About this time, it appears from his wife's account, he had a succession of "bumps" upon his head, often as big as a walnut, and lasting sometimes a few days, but occasionally much longer. They were very tender to the touch, and were doubtless periosteal nodes. A month afterwards there was again a recurrence of fits, on the cessation of which he returned to his office, and resumed duty until a fortnight before his visit to me, but it appeared that he had really been useless there since his attack in July. It was at that time that his hemiplegia had been first observed. He complained of occasional pain in the head, and was described as sleeping very much in the day, and being very restless and unmanageable at night. I ascertained from him that he had first suffered from venereal disorder in 1840, and since then had been affected on no less than seven occasions with primary sores, the last dating eight years back. He had never had skin eruption, but had suffered from bad sore-throat. In the beginning of 1870 he had some ulceration of the scrotum, which remained open for three months, and during this time he felt very weak and low-spirited. I ordered him full doses of iodide, under which at first he improved considerably, obtaining rest at night, regaining power over the bladder and rectum, and becoming clearer in his intellect. Subsequently mercury was given to him. The improvement, however, which was at first manifested, did not last, his mind became more and more fatuous, and in April he was sent to an asylum, where he died about a twelvemonth afterwards.

Five years ago a shopman, aged twenty-eight, was sent to me by Dr. Slight, of Brewer-street, suffering from imperfect left hemiplegia. This condition dated from an attack four years previously, in which, as he sat by the fire, his left leg was worked violently up and down, and he fell into the fender, without, however, losing consciousness. He then found that his face was drawn to one side, and there was a great loss of power in the arm and leg of the left side. He gradually recovered to a certain extent, and resumed his occupation three or four months afterwards, but never felt quite well. I advised that he should be treated with bichloride of mercury. In November, 1867, he again had a fit, and this time he was unconscious for thirty hours. On regaining his senses he found himself paralysed in the right arm, and aphasic. Before this attack he had suffered from partial loss of sight. In January, 1869, I saw him again. His grasp was then equal on each side, but the left leg was stiff and halting. In 1870 he had a third attack, in which his left leg became powerless. In November, 1871, he was affected, for the fourth time, with a paralytic seizure. On this occasion he became paraplegic and lost his consciousness for so long a time that he remembers little or nothing that occurred during many months.

This man had a syphilitic sore in 1860, for which he was salivated, and a few months afterwards a pimple-like eruption, which lasted, as he says, for years. He also suffered from ulcerated throat.

Through the courtesy of Dr. Slight I had the opportunity, a few days since, of again examining this patient. Since I had last seen him, he had been on one occasion for several months in a hospital, where, so far as I could make out, his mind had been much affected. On examination, I found partial paraplegia, diplopia from imperfect power of moving the right globe, and contraction of the right pupil. He

* THE LANCET, December 3rd, 1870.

could grasp very strongly with either hand, and his speech was not affected. Sensibility was everywhere perfect. The right optic disc was partially atrophied, and there were evidences in this eye of old choroiditis. His memory, he told me, was very imperfect, but he answered my questions for some time with very fair intelligence and quite to the point. Presently, however, *apropos* of nothing connected with the subject, he gravely remarked, "If the Bible is true, I am the prodigal son, and the future king of England," and went on to announce that the Holy Ghost was in his body. He also assured me that he constantly saw a black dot and a hair following him about, evidently to watch him, and believed that they came from the hospital in which he had been a patient.

(To be concluded.)

TWO CASES OF LITHOTOMY IN OLD MEN WITH UNUSUALLY ENLARGED PROSTATES.

RECOVERY OF ONE PATIENT; DEATH OF THE OTHER ON THE SIXTH DAY AFTER THE OPERATION.

BY W. F. TEEVAN, B.A., F.R.C.S.,
SURGEON TO THE WEST LONDON AND ST. PETER'S HOSPITALS.

THE operation of lithotomy, at all times interesting, becomes especially so when some unusual complication appears during its performance which increases its difficulty and adds to its risk. There is not only nothing unusual in the combination of stone in the bladder and enlarged prostate, but, as a rule, the two conditions are actually associated, so that it is rare to meet with calculus in adults without also finding the prostate more or less enlarged. The converse of this proposition would not, however, generally obtain. The profession is indebted to that veteran surgeon, Mr. Coulson, for an enunciation which has often led to the detection of a stone when there were but few symptoms indicating its presence. "Behind an enlarged prostate always suspect a stone." Fortunately it but rarely happens that the size of the prostate is such as to prevent the finger reaching the bladder, but in the cases I am about to relate the enlargement was so great as to remove the bladder to about double the normal distance from the surface of the perineum. The patients whose cases I am about to describe presented many points in common, but, as usual, each had its special features. They came under my care at the respective hospitals to which I am attached.

CASE 1.—M. R——, aged sixty-five, cap-maker, was admitted into St. Peter's Hospital on May 1st, 1871. He gave the following account:—Seven years ago he began to pass small mortar-like pieces of stone very frequently, and four years ago commenced to suffer pain at the end of the penis. A little later a few drops of blood would often escape after making water. About this time he began to have difficulty in urination, and the stream of water would suddenly stop, and change of position would alone restore it. A ride in an omnibus was always followed by bleeding. He now consulted Mr. Buxton Shillitoe, who detected a calculus, and completely rid him of it by lithotrity in six crushings. Six months later another stone made its appearance, and it also was crushed by Mr. Wade. The patient remained well for about a year, when all his old symptoms returned with increased severity. No history of stone in his family.

Present state.—The patient is a fat and powerfully-made man, but his lips and cheeks are blanched from the daily losses of blood which have been going on for some weeks. Is a native of Warsaw, Poland. His parents were born in the same country. Can walk but slowly and with much pain, for any active movement brings on bleeding, which often lasts for days. Can only make water when lying on his side; the stream is small and passes guttatim. Much fixed pain in the perineum.

I tried to pass a sound but failed. Rectal examination showed an enormously enlarged prostate. The patient was put to bed and ordered gallic acid, and ice to be applied to the hypogastric region. Towards the end of the month the effects of the treatment were visible, for the bleeding had stopped and the patient's health was improved. Accordingly on May 29th, I introduced a very long and greatly curved silver catheter into the bladder, and with the convexity of the instrument I struck a stone, which elicited a very faint click. Bleeding reappeared on June 2nd, and lasted with but little intermission for four days. The hæmorrhage was clearly from the veins around the prostate and neck of the bladder.

June 20th.—As the patient's condition had improved during the last fortnight, he was put under the influence of chloroform at 3 P.M. by Mr. Sloman, jun., and having introduced a very long and much-curved staff, I gave it to my colleague, Mr. Walter Coulson, to hold. A very faint click was heard when the convexity of the staff struck the stone. After I had opened the groove in the instrument, I found that my left forefinger was soon left behind, the knife travelling onwards for some distance, till it was arrested by the end of the staff. The perineum was so fat and deep that the finger could only reach to the entrance to the prostatic urethra. In order to introduce the forceps I had to enlarge the wound by cutting outwards and downwards with a probe-pointed bistoury, and after I had grasped the calculus I had to repeat the above procedure in order to let it glide out without any violence being used. The hæmorrhage was very free at the time, but it rapidly subsided of its own accord.

The patient made an excellent recovery, and left the hospital quite well on July 29th. He called on me a few weeks ago, and said he was very well in all respects. He owes much to Mr. S. G. Sloman, jun., then house-surgeon, now of Farnham, for his watchful care of the case. The calculus was phosphatic, ovoid, and measured five inches in its longer circumference, and only half an inch less in its shorter.

CASE 2.—J. S——, in his sixtieth year, omnibus-driver, was admitted into the West London Hospital on Sept. 5th, 1872. For the last twelve years has passed red gravel very often. Three years ago began to suffer much pain at the end of the penis when he was driving, and was troubled with frequent calls to urinate. Blood frequently passed after going over a rough road. A few weeks later the pain forced him to relinquish his occupation, and to seek for advice at a dispensary, when he was told he had a stricture and was treated accordingly. As he got no better he went, a month later, to a hospital, where he was informed that he had no stricture, but a very enlarged prostate. He remained an out-patient for one year, during which time he was suffering from difficult and painful micturition attended with the escape of a few drops of blood after any exertion.

When admitted into the West London Hospital his state was as follows:—Is fat and of very florid aspect, but of a nervous, fidgety temperament. Is troubled with frequent calls to make water; can only pass a little urine at a time, and that with difficulty. Much pain at the end of the penis. Blood escapes after riding in an omnibus or on any exertion. The patient and his parents are natives of Middlesex. No history of stone in the family.

Previously to the patient's admission I had detected a stone with a very long curved catheter. No sound nor lithotrite could be introduced. His perineum was fat and deep, and rectal examination demonstrated a very enlarged prostate. There was not much albumen in the urine.

On Sept. 17th, at 3 P.M., the patient was put under chloroform by Mr. Wyman, and as the stone could not be felt with the rectangular staff which I had introduced with some difficulty, I withdrew it and passed a very long and much curved one, which elicited a faint click from the calculus.* When I had opened the groove the finger was soon left behind by the knife, which travelled on for some way by itself before arrested. The perineum was so fat and deep that I could only touch the prostate. In order to get the forceps into the bladder, I had to repeat the procedures already detailed in the previous case. Four lithic-acid calculi, each about the size of a shilling, and weighing in all an ounce and a half, were extracted. The bleeding was profuse during the operation, but it was speedily arrested by a plug of lint. An hour later the patient was quite comfortable, cheerful, and his lips and cheeks had resumed their usual roseate hue.

* My colleague, Mr. Alfred Cooper, held the staff.

Sept. 18th.—Patient is quite free from pain, and has had several hours' sleep. Mr. Ward found the temperature in the morning to be 99° and the pulse 130. On the next day the temperature remained the same, but the pulse had fallen to 100.

21st.—A little trickling of blood took place from the wound to-day, but it soon stopped. A large elastic catheter passed into the bladder proved that there was no internal bleeding.

22nd.—The patient progressed favourably till this evening, when the tongue became rather dry and brown. During the night he was very restless and wandered at times.

23rd.—7 A.M.: Pulse very quick and feeble; tongue dry and brown. Once complained of pain in abdomen. Suffers much from thirst. Laughs and talks rationally one minute, but wanders the next.—10 A.M.: Patient much worse; the pulse can hardly be felt. From this hour he rapidly got worse, and died at mid-day.

A post-mortem examination was requested, but refused. It would thus appear that the mode of this patient's death was similar in all respects to what so often obtains after amputations on fat, ruddy-looking men—all going on well for some days, when the tongue becomes dry and brown, and death rapidly ensues.

The patients presented certain points in common. They were both fat, heavy men, and unfavourable subjects for operation, and they had suffered from their complaints for years. In neither case could a sound or lithotrite be passed into the bladder, but the local symptoms were so marked that the presence of a calculus was in each case unmistakably declared. Each operation presented the same obstacle to reaching the bladder, and the hæmorrhage was necessarily severe, for the tunnel made by the knife between the bladder and the perineum was double the usual length, and in the second instance the bleeding was more profuse, as the operation took a longer time, for there were four calculi to extract instead of one. The patient who died possessed several advantages over the other one, for he was not so old, and his strength had not been prostrated by the losses of blood which the other had experienced almost daily for many weeks. He had, too, the advantage of whatever experience I might have gained in operating on a case beset by similar difficulties to his.

Portman-square, W.

ON THE

NEW FRENCH METHOD OF DRESSING WOUNDS BY COTTON WADDING.

BY WALTER REID, M.D., SURGEON R.N.

(*Communicated by* THE DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.)

A NEW method of dressing wounds, at present attaining great popularity amongst French surgeons, is that which is known as the "pansement ouaté" of M. Alphonse Guérin, of the Hôtel Dieu. It consists in the use of large quantities of cotton wadding, somewhat after the manner of treating extensive burns by the same material. About two years ago, towards the close of the war, and during the days of the Commune, M. Guérin first put this in practice in the Hôpital St. Louis. The properties which cotton wadding possesses of filtering the atmosphere, the regular elastic compression and uniform temperature which its application induces, were qualities which he thought might be turned to good account in the treatment of wounds and other surgical diseases. An attendance of nearly six months in the hospitals of Paris during the course of the winter has enabled me to write with some authority on this subject, which well merits the attention of the profession in this country. The method is peculiarly applicable to cases of amputation, and in order to describe the manner of using it I will suppose a case of circular amputation at the thigh. Bleeding being carefully stopped, the ligatures are cut short, except that of the main artery, which is allowed to remain of the usual length. The wound is then washed with a solution of camphor and alcohol, of carbolic acid, or other disinfectant. The stump being now elevated and the loose integuments slightly stretched outwards by an assistant, portions of cotton wadding are inserted so as completely to fill without distending the cavity thus formed. Several layers of the same material are then applied over the stump, and carried in the form of broad rollers round the limb as high as the groin or pelvis. The volume of the whole ought to be at least three times that of the thigh, or about the circumference of the patient's waist. A number of bandages are then carefully applied, the constriction being at first moderate, but gradually increasing until it is as powerful as the hands of the surgeon can make it. The limb is now placed in a horizontal position, supported by a pillow, and allowed to remain so for twenty or thirty days.

The first thing that strikes the surgeon is that the patient, during the whole of this period, is free from pain, which neither comes on spontaneously, nor is it induced by the contact of surrounding objects, or by their shock. A peculiar odour is generally exhaled during the first ten or fifteen days, which, however, can be destroyed by the use of disinfectants applied to the outside of the apparatus.

M. Verneuil, the accomplished Professor of Clinical Surgery in the Hôpital de la Pitié, has paid great attention to the temperature in these cases. He finds that it averages 38·5° C. (101·3° F.) during the first twenty-four or forty-eight hours. It then returns to the normal standard and never rises again. M. Guérin's own experience is similar.

I recently saw, in the service of M. Guérin, the removal of the dressing in a case of amputation of the upper arm after thirty-two days' application. On arriving at the deeper layers of wadding, they were found to be firmly glued to the integuments in the vicinity of the wound. About half a wineglassful of matter came away with the dressing. It had a peculiar odour, not that of putrescent pus, but which M. Guérin attributes to the confined sebaceous secretion. The skin was quite normal, being free from redness, swelling, or any other sign of diseased action. The end of the bone was well covered by healthy granulations, as was also the whole of the traumatic surface; in fact, there was only a healthy granulating ulcer with the characteristic blue margins, showing that the process of cicatrisation was going on. M. Guérin regarded this case as a good specimen of the ordinary result of the cotton-wadding dressing. It was reapplied for another period, which he hoped would complete the cure. Two applications are generally sufficient; a few strips of adhesive plaster is all that is necessary afterwards, if the ulcer is not quite healed.

The dressing is also applicable to other diseases, such as abscess and sinus, especially when connected with joints. I saw a case of synovitis of the knee-joint with sinuses treated by M. Guérin. The sinuses were laid freely open, and the apparatus applied. It has been removed since my return to England, but Dr. Blanc, of the Indian Medical Service, was present at the removal, and writes as follows: "The result was beautiful; all the incisions healed, and the knee about the same size as the healthy one." In these cases it is necessary to apply the wadding from the toes to the groin, in the upper extremity from the fingers to the shoulder.

In having recourse to this method of dressing, various precautions must be attended to. The patient during its application ought to be removed to an apartment where the atmosphere is pure, and then carried back to his own ward. The compression by the bandages ought to bear on all parts alike, and be at the same time powerful. It is therefore necessary occasionally, during the first twelve days, to apply more wadding and bandages, so as to conduce to this end. In amputations at the thigh the stump is liable to elevate itself, and cause the bone to protrude; this will be avoided by maintaining it in the horizontal position. The temperature must be taken regularly morning and evening, as it will give the first indication of anything going wrong. Nothing need be apprehended if it remains normal after the first forty-eight hours.

The advantages contended for by the advocates of the "pansement ouaté" are—

1. Avoidance of the action of the air, which irritates not only by its physical properties, but also by reason of the minute organised bodies which it holds in suspension.

2. A compression, firm, elastic, and sustained, which moderates the afflux of the blood, and produces rigorous

immobility of the parts, both in themselves powerful antiphlogistic agents in the treatment of wounds.

3. Remarkable diminution and frequently total absence of pain.

4. Constant uniform temperature of the parts, also an important agent in the treatment of wounds.

5. The ease with which it is applied, and the avoidance of the evil consequences of dressing the wound daily or every two days.

6. The protection afforded locally, thus facilitating the transport of the sick and their dissemination in crowded hospitals.

Lastly. The statistics of M. Guérin show a very marked diminution in the mortality of his large operations since his adoption of this method. Thus, during the troubles in Paris, when his wards were crowded with wounded men under the worst conditions, nearly all his large operations were fatal; but after its employment he had nineteen successful cases out of thirty-four large operations.

I might also mention its safety. Out of numerous cases, I have not seen an untoward accident, nor have I heard of any which might be fairly attributed to this new method of dressing.

It seems destined to render great service to the practice of surgery, particularly to that of the navy and army, in the treatment, for example, of severe wounds or accidents on board men-of-war; when, owing to the motion of the ship, it is almost impossible otherwise to protect traumatic surfaces, or to obtain immobility of the parts. Again, on the field of battle there is no method likely to offer greater advantages in the treatment and transport of the wounded.

M. Guérin hopes in course of time, by a modification of the process, to obtain union by the first intention in flap operations on the extremities. Experience is as yet wanting on this point.

Army Medical School, Netley.

THE EFFECTS OF THE WATERS OF EMS IN DISEASES OF WOMEN.

BY N. GEISSÉ, M.D.,
PHYSICIAN AT EMS.

THE well-known alkaline, muriatic, gaseous, thermal waters of Ems have for many centuries past been resorted to by a great number of women suffering from diseases peculiar to their sex; and every year the number of such is increasing who gratefully remember the benefit received from a course of waters. The action of the waters is the result of the collective effects of the alkaline and saline remedies, as well as of carbonic acid. The high temperature also forms a noticeable feature. Pointing out the effects, I may say that these waters remove congestion, reduce the products of inflammation, diminish the increased secretion of the mucous membrane, and soothe nervous excitability. This being said, I will enumerate in few lines the diseases of women in which these waters can be recommended.

Amenorrhœa.—I must exclude from the treatment with Ems waters all cases in which this malady is caused by anæmia or congenital malformation; and I have only been successful in cases in which the non-appearance, irregularity, or suppression of the menstrual flux was caused by abdominal plethora, internal congestion, sexual excess, or by mental shock and exposure to damp and cold.

Menorrhagia.—When the catamenia are abnormally increased or prolonged through the existence of granular degeneration of the kidneys and albuminuria, or by abdominal plethora, uterine and ovarian congestion and irritation, or by imperfect involution after delivery, the Ems waters have proved to be of excellent service; but when the cause of over-abundant or over-frequent menstrual flux is found in general debility, organic disease, hæmorrhagic diathesis, or in the presence of tumours, I must abstain from their recommendation.

Dysmenorrhœa.—Not a small number of the different forms of this affection—as congestive, neuralgic, membranous, gouty, and rheumatic—have been benefited at this place; also the regular appearance of uterine pain, during the intermenstrual period, I have successfully treated in several cases.

Vaginismus.—The vulva is the seat of this pain, which often makes married life a misery. The bladder is not unfrequently very irritable, and pain in the back (coccygodynia) is complained of. Soothing baths and warm internal douches have done much benefit in some cases; while in others I have inserted a glass speculum during the bath, which not only permitted the gentle access of mineral water, but also acted as a kind of dilator. Unmarried ladies suffering from this complaint, particularly from a very irritable bladder, I treat with baths and spinal douches.

Eczema and Pruritus vulvæ.—I have had under my care a considerable number of patients with these troublesome affections. Some derived decided benefit, whilst others obtained no relief.

Vaginitis chronica.—Our springs reduce the swelling of the lining membrane of the vagina and of the glands imbedded within, and consequently check the discharge and irritation.

Catarrhus uteri.—A gelatine or matter-like discharge, frequently very offensive, flows from the os uteri, and is often tinged with blood, which comes from erosions or ulcers of the neck. As the mucous membrane of the womb and its glands are the seat of this discharge, it is easily understood that the Ems waters act beneficially.

Hypertrophia uteri.—The Ems waters reduce the enlargement of the womb when it is of a simple character; but they fail to give any improvement in cases in which the enlargement depends upon the presence of tumours, polypi, or cancer. The simple enlargement mostly originates from deficient involution after confinement or miscarriage; it may be total or partial. A further cause is intemperate sexual intercourse, and not unfrequently we see a kind of genuine hypertrophy in women who live in childless marriage. In three cases out of fifteen, where the enlargement of the womb appeared in women who had not had children, conception has followed a repeated course of Ems water.

Misplacement of womb.—In misplacements caused by either total or partial enlargement of the womb, or by inflammation of and effusion into the appendages, the resorbent and diuretic properties of our springs have been frequently of service in reducing enlargement and effusion.

Pelvic abscess.—After cessation of the acute symptoms of pelvic cellulitis, thickening, swelling, and discharge remain for a long time; and here a repeated course of the waters of this place I can honestly recommend, because they sustain resorption, and diminish the discharge which pours from the fistulous communications between the cavity of the abscess and the bladder, or vagina, or rectum.

Pelvic hæmatocele.—I have had two cases sent to me, one by Dr. Oldham, the other by the late Sir James Simpson. In both there was considerable swelling, an irritable bladder, dysmenorrhœa, and the womb nearly horizontally retroverted. In both cases I observed a rapid decrease of these symptoms during the course of waters.

Sterility.—Pretty nearly all the diseases of the genital organs of the female sex mentioned above are more or less liable either to prevent conception, or to produce miscarriage and premature confinement; but there are a few more causes of sterility existing which can be altered by a thorough course of Ems waters. In not a small number of young married, but childless women, who look pale, are thin, and have a delicate frame, the womb is imperfectly developed; the examining finger finds a small and hard cervix; the sound shows the womb to be of below the normal size, and slightly anteverted; the menstrual flux is mostly scanty, frequently irregular; and sexual appetite is wanting. Short baths of a moderately cool temperature, a gentle but warm and short uterine douche with Ems waters, followed by a course of iron waters at a chalybeate watering-place, have done much towards the development of the womb and the appearance of sexual desire, as well as to the improvement of general health. Quite differently-looking is another class of also sterile women. These are strong and fat, mostly fair-haired, and have a delicate skin, but they have scanty menstruation, frequently irregular, and without sexual desire; all abdominal organs are very sluggish. The examination detects nothing abnormal. In such cases a very hot strong douche, of at least fifteen minutes, is required to stimulate the sexual organs; while

protracted warm baths, and the internal use of the alkaline Ems with the aperient Püllna waters, acts well against abdominal torpor, and reduces the accumulated fat.

In concluding my little sketch, I beg to describe the case of a lady patient, who was under my care two years ago. She was a healthy-looking lady, of a gouty family, married five years, but never pregnant, and was sent to Ems because she was much troubled with acidity. The urine deposited a good deal of red sand. I tested the uterine secretion, and found this also to be very acid. After a long course of water the acidity of urine had diminished and the red sand had entirely disappeared; the uterine secretion, also, had become alkaline. The lady became pregnant after having left Ems, and has since given birth to a healthy child.

As experiments have proved that spermatozoa die quickly in an acid fluid, while in an alkaline one they continue to live for several days, it would perhaps be indicated to test the uterine secretion of such sterile women in whom the examination can detect no cause for their not conceiving.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

STRUMOUS DISEASE OF THE TESTIS; CASTRATION; EMPLOYMENT OF ACTUAL CAUTERY; RECOVERY.

(Under the care of Mr. HENRY SMITH.)

SURGEONS are naturally loth to remove a strumous testicle as long as any hope of preserving it remains, as it is always difficult to say how much of the organ may still be unimpaired, or to what extent reparative processes may take place. If, however, only one testis be affected, and that to a great degree, and the suppuration from it is acting as a drain on the general system, it is usually advisable to remove the organ altogether. Nor should the operation be delayed on the ground that after the removal of the disease from one part it may manifest itself in another part; for all clinical experience and recent pathological evidence seems to show tha the presence of an organ in a state of suppuration or of caseous degeneration may be the forerunner of tuberculous disease in the various organs of the body.

The patient, aged forty-two, had been suffering from chronic inflammation of the right testis for some months. Suppuration had occurred in the body of the organ, which had become very much enlarged, and a fungous protrusion of the tubes had taken place with a considerable amount of disorganisation of the scrotal integument, forbidding all hope of any successful attempt to save the organ by the plan recommended by the late Professor Syme. Mr. Smith therefore removed the testis on February 15th last. After making the usual incision and separating the mass from the much thickened and disorganised skin, he isolated the cord and enclosed it within the blades of a large hæmorrhoidal clamp. The testis was then separated, and, instead of tying the vessels, Mr. Smith very carefully and thoroughly applied the actual cautery at a black heat over the whole surface of the divided cord. The blades of the clamp were then slowly released by means of the screw, and it was found that there was not the least oozing of blood from the stump. Before allowing the divided cord to retract, a fine thread was passed through one angle and secured on the abdomen by means of adhesive plaster.

In his remarks, Mr. Smith stated there was not the least hope of preserving the testicle by means of covering it by the operation of Mr. Syme, for on making a section through the organ it was found almost entirely disorganised, presenting a fair specimen of the strumous degeneration, nearly always requiring removal. He had adopted a means of closing the vessels of the cord which, as far as his knowledge went, had not been used before in the human subject—viz., the employment of the actual cautery, the cord having previously been secured by the clamp. It would be observed how bloodless and simple the operation had been. Precaution had, however, been taken to secure the cord in such a way that the house-surgeon could readily get at the vessels if bleeding should occur, which he trusted would not take place.

The case went on well; no bleeding took place, and the wound healed remarkably rapidly notwithstanding the diseased state of the skin, and Mr. Smith has expressed his determination to use the cautery in any cases where castration may be required.

WESTMINSTER HOSPITAL.

STONE IN THE FEMALE BLADDER; REMOVAL BY DILATATION; RECOVERY.

(Under the care of Mr. COWELL.)

ON the 11th ult., Mr. Cowell removed by dilatation a stone from the bladder of a woman sixty years of age. The dilator used was a small one with three blades. The case was one of some interest. The patient had, upwards of two years ago, been in the hospital for some two or three months under the care of Dr. Basham with pyelitis. A few months later she had attended the hospital after passing gravel, accompanied by great pain, and some bleeding after micturition. About twelve months ago she returned to the hospital bringing with her a small piece of bone which she stated had been passed from the bladder. On examination, this proved to be, not human bone, but bone belonging to some animal of the bovine species. There was then considerable doubt as to its having come from the bladder; but three months later she brought two other small pieces of bone, both of which were to some slight degree coated with calcareous deposit. This seemed to set at rest the previous doubt, but it was also certain that this bone must have been introduced into the bladder. The patient had passed no more fragments of bone since, but had returned to the hospital in consequence of continued pain in the back and frequent desire to void urine, an act always followed by severe pain at the neck of the bladder. The pain was much increased if the patient moved about. The urine was loaded with pus and albumen. Mr. Cowell had examined the bladder at Dr. Basham's request, and detected the presence of a stone of moderate size, and, in consequence of the kidney disease, recommended its removal by dilatation rather than lithotrity. The stone was removed readily after moderate dilatation, but its outer layers broke down under the pressure of the forceps, and were brought away in pieces after the extraction of the nucleus, and the bladder was carefully washed out with warm water. The stone was exceedingly friable, of chalky aspect, and composed of successive layers of harder and softer material, the former flaking off easily and in large pieces.

A subsequent examination of the stone showed it to consist almost entirely of phosphate of lime, with a very small amount of uric acid in the harder portions, and the slightest possible trace of ammonio-phosphate of magnesia. No bone was found in the centre of the nucleus, as was suspected might possibly have been the case. The stone weighed 128 grains.

The patient has since done well. There was no incontinence of urine until the fifth day, when the urine escaped involuntarily for about four or five hours. There has been no incontinence since, and the patient has been free from pain. The urine, examined six days after the operation, was of a light-straw colour, of acid reaction, and afforded a light-coloured deposit. It contained some pus, and about one-fourth albumen. Treated by acetic acid, no mucus was found, but the microscope showed a large number of pus-cells and a few blood-corpuscles, but not a single epithelial cell, with the exception of one doubtful renal cell. There were no casts.

CANCER HOSPITAL.

SUCCESSFUL REMOVAL OF A LARGE GROWTH ATTACHED TO CONJUNCTIVA OF RIGHT EYELIDS, AND PERFECTLY OCCLUDING VISION.

(Under the care of Mr. JOHN FOSTER.)

FOR the notes of the following case we are indebted to Dr. Crombie, house-surgeon.

The patient, a healthy female aged sixty-five years, had suffered irritation and pain at the inner angle of the right eye for some time previous to the appearance in that situation of a small fleshy-looking growth, which gradually spread over the eye, causing inversion of both lids, inability to close the eye, and complete occlusion of sight. On her admission it had some resemblance to a fleshy pterygium, but was not adherent to the conjunctiva of the globe, and did not follow its movements. It was very sensitive and painful, and caused profuse lachrymation. The margin of the lower lid was indurated and denuded of eyelashes. Under the angle of the jaw were some enlarged glands, but these, the patient stated, she "had had some time before her eye became bad."

On Oct. 16th, 1872, a vertical incision, nearly an inch in length, was made through the lower lid, and, on carefully dissecting the flaps from the growth, it was found to have intimate adhesions to the conjunctiva of the lid, especially along the lower circumference and around the punctum, from which it had to be dissected. Similar connexions of less extent existed in the upper lid; but the globe of the eye was quite free. Separation was effected without injury to the conjunctiva.

On the 27th, a small fleshy growth of a similar character was discovered on the upper lid, and which had attained some size by November 6th, when it was removed in the same way as the other.

The inversion and the lachrymation are now entirely cured; there has been no reappearance of the growth, and she says her "eye feels as well and as comfortable as the other." Her general health is good.

The microscopic examination revealed no malignant characters, but merely fully developed connective tissue, with a large supply of capillary vessels.

ST. MARY'S HOSPITAL, MANCHESTER.

TWELVE CASES OF OVARIOTOMY.

(Under the care of Dr. LLOYD ROBERTS.)

THE following is a continuation, from p. 238, of Dr. Roberts's series of cases of ovariotomy. It will be seen that the cases are now twelve in number, and not eleven, as originally proposed. The additional case is accounted for by the insertion of the first of the subjoined cases, which, although not strictly speaking an ovariotomy, was the removal of an ovular cyst, which was presumed to be an ovarian cyst, and therefore merits a place with the other cases.

For the following notes we are indebted to Mr. Runcorn, house-surgeon.

CASE 7. *Ovular (?) cyst; abdominal section; weight of cyst and contents* 17½ *lb.; recovery.* — Elizabeth W——, aged forty-four, married, sterile, was admitted July 30th, 1872. Menstruation commenced at the age of eleven; has been regular ever since. Abdomen commenced to enlarge ten years ago. She was tapped in 1867, thirteen pints of clear albuminous fluid of low specific gravity being removed. Tapping was repeated in 1870, and twelve pints of a similar fluid evacuated.

On admission, the abdomen was uniformly enlarged; fluctuation distinct and universal; resonance in both flanks. Girth at umbilicus 36 inches, measurement from ensiform cartilage to pubis 16 inches. Uterus normal; measured 2½ inches; freely movable in pelvis; no fluctuation in Douglas's space. Elevation of tumour by external manipulation had no effect upon the uterus. She frequently complained of abdominal pain. It was assumed that a unilocular ovarian tumour was present, and removal of it was therefore recommended.

On July 31st, 1872, the patient having been put under the influence of bichloride of methylene by the house-surgeon, the abdomen was opened, exposing the tumour, which was found to be covered with a layer of peritoneum intimately attached to the cyst wall, which appeared very thin. About an inch of the peritoneum was separated from the cyst in front by the knife, and, a trocar being plunged into the tumour at this point, fourteen pints of clear, colourless fluid were evacuated. The tumour then collapsed, when it was discovered to be firmly bound down posteriorly by the peritoneal covering before mentioned. On this being carefully dissected off, the cyst was drawn out of the abdomen, and its peritoneal envelope, which appeared continuous with the peritoneal coat of the small intestines, returned into the abdominal cavity. The tumour had no connexion whatever with the uterus, ovaries, or their appendages, which seemed perfectly normal both as to position and structure. During the dissection very free hæmorrhage took place; ten vessels were ligatured with fine silk, the ends of which were cut short, and they were returned with their peritoneal envelope. A large quantity of coagulated blood was also removed with a sponge from the abdominal cavity. The wound, which was two inches long, was now brought together by four silk sutures, and dressed antiseptically. The sutures were removed on the fourth day, when the wound was found to have united by first intention. The patient had not a single bad symptom after operation, and was well in a fortnight.

On examination, the cyst, which weighed six ounces, was found to be composed of a very thin, homogeneous, fibrous membrane, highly vascular. When the cyst was inflated the veins were beautifully seen pervading the entire circumference. The fluid weighed 17½ lb., and was clear, colourless, and feebly albuminous; specific gravity 1004.

CASE 8. *Multilocular ovarian tumour, weighing* 20 *lb.* 2 *oz.; ovariotomy; recovery.* — Betty H——, aged twenty-two, single, was admitted July 30th, 1872. Menstruated at fourteen, and continues to do so still. Noticed that she was enlarging about Easter of the present year. Never been tapped. The abdomen measured forty-one inches over the umbilicus; fluctuation very distinct over the whole of the surface, dulness over the front and sides except inferiorly in the flanks; uterus movable; normal length by sound; fluctuation distinct in Douglas's space on the right side. The patient suffered much pain in the abdomen, in consequence of which she was obliged to keep her bed. She was emaciated.

On August 14th, 1872, the operation was performed under bichloride of methylene, Dr. Macgowan and Mr. Fawsitt, her former medical attendants, being present. The abdomen was opened by an incision six inches long, and the tumour exposed in the usual manner. There were no adhesions. One large cyst having been emptied, a second came into view; the fluid contained in this was also withdrawn. Some slight traction was then used, and the more solid part followed. It proved to be the right ovary; the pedicle, which was narrow and thin, was then clamped, and the tumour separated. The abdominal cavity was now freed from clots, sponged, and the wound brought together by eight silk sutures.

At 5 P.M., after two hours' sleep, 30 oz. of urine was drawn off by catheter. She had vomited a little; pulse 100; skin moist. Ordered ice.

On the second, third, and fourth days the pulse ranged from 112 to 120; her temperature not being more than 101° to 102° F., but occasional nausea, heartburn, and thirst; slept well. Has taken iced milk and soda-water, arrowroot, and brandy, and sago puddings. Passed flatus freely per rectum.

17th.—Four ligatures removed and the wound dressed; no pus.

18th.—The remaining four ligatures were removed; the wound had nearly healed; very little pus; and the clamp was tightened.

21st.—The clamp was removed, and from this date she continued to progress without an unfavourable symptom. The ulcerated umbilicated depression made by the clamp had healed by the 7th of September, and she left the hospital on the 14th. The tumour is multilocular, and with its contents weighs 20 lb. 2 oz.

HÔPITAL LA CHARITÉ, PARIS.

REMARKS ON THE TREATMENT OF PNEUMONIA.

(By Professor GERMAIN SÉE.)

IN a clinical lecture recently delivered at this hospital, Professor Sée made some valuable remarks on the above subject. He divided the methods of treatment into four—1. Bouillaud's "jugulating" system (large bleedings). 2. The expectant method. 3. Cardiac medicines: tartar emetic in large doses, digitalis, veratrine (these should not be confounded with the antiphlogistic, which would include bleeding, nor with antipyretics, all of which do not act on the heart). 4. The English method of employing alcohol as a refrigerant and antipyretic, which was introduced into France by Professor Béhier. Lastly, he alluded to the method of treating symptoms: opium against cerebro-spinal manifestations; large blisters, which brought on cystitis; small blisters, to relieve pain.

Professor Sée, insisting on the method of expectancy, made some important remarks on its value, the significance of statistics, critical days, and the appearance of labial herpes. Dr. Grandmotet, a disciple of Teissier and a homœopath, had published a thesis crowded with cases cured by homœopathy. Valleix refuted the thesis, and showed that without any treatment at all cases of pneumonia recovered as well as with homœopathy; therefore, pneumonia was cured without any treatment.

There were, however, pneumonia and pleuro-pneumonia. First, there was the important question of age. Barthez and Legendre had established that all children from two to four invariably recovered without treatment, and Professor Sée, during his stay at the Hôpital des Enfants, had not seen one case of pneumonia end in death under the expectant treatment. In such cases bleeding and tartar emetic were dreadfully mischievous.

As to statistics, the following had been given in respect of the rate of mortality:—Bleeding, 20 per cent.; tartar emetic, 12 per cent.; digitaline and veratrine, about 9 per cent.; alcohol, 5 per cent. (Hughes Bennett); expectancy, 13 per cent. (German statistics.) But the truth was that figures, when drawn up without reference to the age of patients, were terribly misleading. In children, the mortality was 0; in adults, after fifty years, 50 per cent.

Again the age of the *disease* should be taken into account. Bouillaud pretended that by bleeding he "jugulated" pneumonia; and Cochère, of Berne, that he did the same with veratria. They were both right as to the first day, but not so as to the third. And here the study of critical days, so much insisted upon by Hippocrates, was most valuable. During the first day the thermometer showed 40° C. (104° F.), and as much during the three following days. On the morning of the fifth day there was a fall to 39° C. (102·2 F.), and the disease might be considered to be "jugulated"; but on the evening of the same day the temperature would rise to 40° C. (104° F.), increase to 41° C. (105·8 F.) on the sixth day, whilst on the seventh, which was really the critical day, defervescence began. Figures had shown that out of 226 cases, 33 recoveries took place on the fifth day (these had really been jugulated), 51 on the seventh, and 132 on the ninth.

What was the explanation of this crisis? Neither a philosophical one nor one founded on the exit of an ill-humour, as had been formerly supposed, but a physiological one—the law of regeneration of tissue. During the course of pneumonia, the patient's heat was 40° C. (104° F.), and consequently the blood clotted easily, fibrin formed in excess, and the urine presented an excessive quantity of urea, the temperature of the patient being at the greatest height. Only a little uric acid could be found in the urine, whilst the chlorides were altogether absent (a good test for distinguishing pneumonia from typhoid fever). On the critical day all these symptoms disappeared, the chlorides came back, and the urine was full of urates and uric acid.

Professor Sée concluded his remarks on expectancy by referring to herpea labialis. This was not a critical phenomenon, since it appeared as early as the third day, but it was really a favourable sign. Out of 145 cases of pneumonia in which herpes had appeared, there were 123 cures, which took place definitively on the fifth or seventh day. Generally pneumonic sufferers with herpes died only in the proportion of 9 per cent., and those without in the proportion of 29 per cent. In the aged herpes seldom appeared: 75 per cent. with herpes recovered, and only 25 per cent. without herpes. In youth namely, a favourable time of age, herpes might be considered as almost a certain sign of speedy recovery.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 8TH, 1873.

DR. C. J. B. WILLIAMS, F.R.S., PRESIDENT, IN THE CHAIR.

ON THE ELEVATED HEALTH RESORTS OF SOUTHERN HEMISPHERES, WITH SPECIAL REFERENCE TO SOUTH AFRICA.

BY E. SYMES THOMPSON, M.D., F.R.C.P.,
PHYSICIAN TO THE HOSPITAL FOR CONSUMPTION, BROMPTON.

THE author observes that, whereas works on special health-resorts suited to the very wealthy and very delicate are almost numberless, there is a need for more general information about those less accessible resorts which, in these days of facile locomotion, are within the reach of persons of moderate means.

The profession, and the better-informed portions of the public, realise that chronic chest disease, or a tendency thereto, is not to be combated by a winter or two spent in a sunny health-resort; and that what is needed is a prolonged sojourn in a climate and under circumstances diverse from those in which the disease originated. They therefore manifest increasing readiness to advise the sufferer to undertake a long voyage, and stay several months or years in a well-selected climate.

The author, having had peculiarly favourable opportunities for gaining information about the Australian and South African colonies, trusts that his observations may not be without value to the Society.

The climates are classified, not according to latitude and elevation (Dr. Hermann Weber), but according to elevation and observed mean annual temperature. Isothermal lines are shown by a map to pass through countries in the Southern hemisphere in a very different and much more northerly position than do the isothermal lines corresponding to them in the Northern hemisphere.

Statistics of mean annual observations are misleading as criterions of actual temperature and rainfall, for thus places very dissimilar are grouped together—e.g., Lisbon and St. Helena, in which case the winter temperature of the former is 12° colder, and summer 11° hotter, than in the latter; while a place may have a dry climate and a heavy rainfall—e.g., the Karnatic,—and *vice versâ*.

Again, in the same district, the physical geography of the country may lead to vast diversity in forming a sound opinion of the climate; so it is needful to study each place in detail, although the isothermal lines are of service for general indications. So also with regard to latitude, for we must remember that for each parallel of latitude a lower elevation is sufficient for securing immunity from phthisis than in the corresponding parallel of the Northern hemisphere.

After touching upon the difficulty of deciding between the claims of the various European health resorts, some details are given as to the facilities and advantages of sea-voyages, the superiority of the sea-voyage to India over the Suez route, and of the passage round the Cape of Good Hope over that round Cape Horn.

The first group of health resorts described is that of the Cape.

Cape Town (lat. 34° S.) itself lies low; it is too hot, and subject to violent south-west winds; but Wynberg, reached by railway nine miles off, is healthy.

Graham's Town (1800 feet elevation) is healthy and somewhat cooler than Pieter Maritzburg, the capital of Natal. It bears the same climatic relation to Port Elizabeth as Maritzburg does to Port D'Urban.

Natal (lat. 28° to 32° S.) has low coast-lands almost subtropical in character, but the land rises in steps or plateaux. Maritzburg, its chief town, fifty miles from the coast, has an elevation of 2000 feet, and the land rises immediately behind to a height of 3800 feet. The prevailing moisture-

laden S.E. winds make the rainfall on this ridge considerable, but a few miles inland mist, cloud, and rain lessen. The high table-land extends beyond the Drakenberg mountains; these form the backbone of this part of S. Africa, and rise here and there to a height of 9500 feet. The leading peculiarity of the climate is that in winter it has almost constant sunshine and little rain, though abundant rain and cloud in summer, so that the mean temperature of winter is greatly raised and of the summer is agreeably depressed.

The Free State (Orange River or Transvaal) is an elevated (5000 feet) pastoral country extending westward from the Drakenberg. The air is very exhilarating, whereas Natal is somewhat too relaxing for a perfect sanatorium. The character of the climate is described and the mean temperature, rainfall, &c., exhibited by tables, and evidence collected from public reports of local medical men, &c., is given as to the prevalent diseases of the country.

Passing westward beyond this, the climate becomes yet drier and the land more sterile, until we reach the rainless and utterly barren country of the interior. The point to be sought is that at which there is no excess of either dryness or humidity, and this is to be found in the neighbourhood of the capital of the Free State Bloemfontein. A few years ago there was much difficulty in reaching this place and obtaining suitable provision for an invalid, but the increasing prosperity which has followed in the wake of the diamond discoveries is improving this, and when the railway has taken the place of the slow ox waggon, it will become easily accessible.

A passing notice is given of the elevated Indian sanataria, which, although north of the equator, are south of the equatorial heat line, and thus meteorologically in the southern hemisphere. Among these are mentioned the Neilgherries, 7600 feet, Neurellia, the sanatorium of Ceylon, and the mountain health resort above Penang.

The climate of Australia is next compared with that of S. Africa, the Natal winter being more healthy for invalids than summer or winter in Victoria, and the Victoria summer probably more healthy than that of Natal.

Queensland resembles Natal in one respect: that the summer is the rainy season in both; but the former has no table-lands above 2000 feet, an insufficient elevation for this latitude.

The Darling Downs, behind Sydney, are about the same level, rising even to 3000 feet, and there are very healthy stations at nearly 2000 feet elevation on the Murray River.

Mont Lofty, behind Adelaide (2000 feet), is highly spoken of.

The climate of Tasmania is very delightful, but its highest mountains are under 4000 feet, and there are no really elevated health resorts.

New Zealand is very mountainous, having peaks rising to 12,000 or 14,000 feet, but its ridges are like the Sierra of Spain, and there are no table-lands at any considerable elevation. The extreme windiness of the climate is its chief evil, but sheltered plains may be found, as at Cook's Straits.

At the South American resorts on the east coast (Buenos Ayres, &c.) there appear to be no high lands; but on the western coast every important town has its elevated sanatorium. Some of these are highly eulogised, and, as compared with the hot and crowded ports below, have doubtless many advantages; but there are few English, and English doctors are rare. The country is dry in many places, exposed to earthquakes, as well as political revolutions. Piura, above the port of Payta, lat. 5° 9′ S., is specially praised.

The Appendix consists of twenty cases, chiefly of lung disease, in which southern health resorts have been tried. The family history and physical signs of the chest, before and after the trip, are briefly given, with sufficient details for the recognition of the cases, and to demonstrate the influence of the climates referred to.

Dr. BURNEY YEO said he had no experience to offer with regard to the places spoken of by Dr. Symes Thompson. He could speak of the results in cases sent to the elevated regions of Switzerland. He could not confirm what had been said as to the advisability of sending patients to live in the Engadine. He thought that only a few of those sent there could do well, considering the altered conditions of life. There was first a rapid alteration of temperature; then the cold was great through more hours of the twenty-four than here. Thirdly, the air was more rarefied. Patients who had a large portion of lung disorganised could not live under such conditions. Since the air was more rarefied respiration must be quickened. He remembered a patient who died within twenty-four hours of his arrival, simply asphyxiated. He could only take in a little air at each respiration, and this was so diluted as not to satisfy. Then, again, the cold stimulated the action of the lungs, increasing the rate of respiration. He had seen patients in the Engadine rapidly pass through all the stages. Some cases did badly in elevated regions and others did well; in these latter there was a latent power of active respiratory function. If the lung was more diseased or the heart weak, or the circulation disordered, then they did not do so well; too much strain was thrown upon the system. The following he thought did well in those regions—viz., cases of chronic laryngeal catarrh and chronic bronchial catarrh in young people, and diseases of the nature of catarrhal pneumonia in the summit of the lungs.

Dr. MANN said he knew the region in Natal to which Dr. S. Thompson had referred as a health resort, and would state the physical conditions upon which the climate depended. A ridge of high land ran across the colony of Natal, about one mile high and about seventy miles from the sea; ridges, in finger-like projections, ran from this range to the sea. Beyond this mountainous ridge there was a depressed area; this was said to have been once a sea, but afterwards raised. This was the health resort referred to. The climate was determined by the range of hills. There was a constant south-east wind, which brought cold and moisture from the Indian Ocean. Thus the climate was cool and the moisture was deposited on the tops of the hills. During the summer the wind was most laden with moisture, so that the rainfall was from January to March and from September to December. There was little rain from May to August. As you went up the country the rainfall was less. Beyond the slope, in the Free States, the temperature was all the year the same as during the winter in Natal. It would, however, be necessary to select in each case the situation for the patient, as there was so much vicissitude. The great drawback to a residence in the Free States was the want of the comforts of life and the difficulty of conveyance. As the colony advanced, fixed stations would be established. The Cape climate was the opposite to that of Natal. There was rain in winter and heat in summer.

Dr. THEODORE WILLIAMS thanked the author for the excellent information he had given about Natal and other health resorts, but differed from him with regard to the importance he attached to Kuchenmeister's theory, which was that elevation above the sea-level varying according to the latitude necessarily gave an immunity from phthisis, his paper being based upon that theory. He would draw Dr. Thompson's attention to the fact that there were several places in the world where phthisis was unknown, and these regions were below the level of the sea, as the Khirgis Steppe, 100 feet below the sea-level; and parts of Madras. There were, it was true, certain elevated positions where there was an immunity from phthisis. He thought the theory had been too readily adopted. He could not speak against it entirely, as in some cases there was much evidence of good resulting from living in elevated places, and he was disposed to give the elevated places a fair trial. He did not agree with Dr. Yeo as to the harm resulting from living in the elevated regions of Switzerland, as patients in South America had passed months at higher levels than St. Moritz without any bad effects. If an elevated health-resort was sought, he thought we should look to the Andes, where a great choice of elevation could be combined with equable temperatures. In Bolivia cases of phthisis were unknown except as exotics. Cases of rapid consumption were sent from Peru to the upper ranges of the Andes—to La Paz, Quito, and Santa Fé de Bogota, and the result was highly satisfactory. The Lima authorities had recently erected a hospital for soldiers at an elevation of 10,000 feet at Jauja. Patients sent to the Andes by English and French physicians had done well. Dr. Williams then gave the case of a Swiss watchmaker suffering from phthisis who went to La Paz and his health greatly improved; he went to the lowland of Panama, and became worse; he returned to La Paz with benefit, and again relapsed on reaching Panama. He repeated this several times, and even

revived when in a dying state on reaching the highland. There was a feeling in South America that if a patient was consumptive and he went to the hills early he always recovered. This was perhaps exaggerated; but without doubt the belief rested on a basis of facts. There was a fair amount of comfort to be obtained in the places in the Andes.

Dr. SYMES THOMPSON, in reply, said that with regard to Dr. Yeo's observations he thought that what he had said of the Engadine were the views generally held by physicians who had had patients there whose lungs were much destroyed. The difficulty of breathing was great and aggravated by the cold and alteration of temperature. He had brought forwards his account of South Africa as meeting this. There was no snow and no severe cold as in the Engadine. He thanked Dr. Mann for his interesting account of the physical geography of the colony. He agreed with him, that probably health resorts could be found on the elevated table land as good as those in the Free States. Dr. T. Williams had made some interesting observations as to the Andes. He had not said much about them, but rather spoke of what he had had experience, leaving other subjects to those who had had an opportunity of gaining information on those points. As to the case Dr. Williams had given in detail, he would say that one of the patients went to Natal four times and recovered each time from an attack of hæmoptysis; the voyage and his residence there each time benefited him. With regard to a question asked by Dr. Sansom, there was no evidence to show that heart disease was prevalent in the South African colonies.

Mr. JOHN WOOD exhibited a patient on whom he had successfully operated for extroversion of the bladder. He had performed the operation in his usual way.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 10TH, 1873.

DR. S. O. HABERSHON, PRESIDENT, IN THE CHAIR.

THE PRESIDENT delivered his opening address, of which the following is a brief abstract:—Ushering into its second century, he felt deeply sensible of the honourable position to which he had been elected, but he feared it would be an arduous duty to maintain the high standing to which the Society had been raised by the untiring efforts, energy, and talents of his predecessors. He congratulated the fellows on the possession of their present premises, unfinished it was true, but they were such as gave good promise of being equal to all the requirements of the institution. Since the Society was founded a hundred years ago, there had been a gradual development of the science of medicine, and it was difficult now to realise the position of our profession *then*. Harvey, Malpighi, and Boerhaave had lived and worked, and the leaven of their writings had begun to prepare the profession for the great improvements that were to take place. He then called attention to the rapid stride made in medical knowledge during the last century, pointing out some of the most remarkable examples. "What," said he, "could be our knowledge of phthisis without the stethoscope and before Laennec? What confusion in the treatment of thoracic disease! How different our knowledge of pneumonia and its treatment before disease was regarded in its general aspect, and not as an entity apart from the patient! What was our knowledge of heart disease before the stethoscope, and before such men as Hope, Latham, Stokes, Graves, Watson, and a host of others, lived? How have hygienic measures prevailed? Simply because vague hypotheses have given place to truth, which has an influence spreading throughout the land. If the work be done well by those to whom the health of greater or smaller districts is committed; if they are thoroughly able to do their work, and free to tell the truth, the benefit will be very great. What, again, was known about renal disease before the time of Bright, and how little was syphilis understood? Surgery was practised for many long years without the use of anæsthetics; if chloroform had not been introduced, ovariotomy and other valuable operations would scarcely have been dreamt of." The President then referred to the introduction of the microscope and the thermometer into clinical medicine, together with the laryngoscope, the ophthalmoscope, and the sphygmograph. He impressed on the fellows that, while they accurately inquired of nature, they should neither misrepresent nor go beyond facts; for false statistics and inaccurate observations and deductions had always been immense barriers to the progress of medical science. The Medical Society regards the unity of the maladies of mankind, man in his completeness, the effect of the mind upon the organism, and thus it seeks to avoid the errors of specialism. How many mistakes arise from our regarding individual symptoms rather than studying the whole nature of the malady. Reference was then made to the state of the colon in disease of the kidney, or acute suppuration in the loins. He then concluded by saying that the Society invited communications upon every branch of medical science, on mental diseases as well as obstetrical, and pathological facts as well as clinical experiences were always welcome; and he hoped that, having the help of those present, the year just entered on would prove one of progress to the Society.

MARCH 17TH, 1873.

Mr. GANT showed a case of recovery from very severe Laceration of the Hand.

Mr. THOMAS BRYANT related a case of Tracheotomy, advocating early operation in cases of continued progressive ulceration of the larynx. N. A——, aged twenty-four, was admitted into Guy's Hospital Nov. 19th, 1872, with impending suffocation from laryngeal disease, demanding tracheotomy, which the house-surgeon, Mr. Turner, performed. She had been married three years, but had no family or miscarriage. She had suffered from syphilitic eruption with sore-throat for two years, and had lost her voice. The operation was followed by speedy relief, and a rapid convalescence. The ulceration of the soft palate healed quickly, and on the fourteenth day Mr. Bryant removed the canula, when he found that respiration went on naturally, although the voice was feeble and husky. Twelve hours after the removal of the canula the wound in the throat closed, and she left the hospital the week following. After the fifth day she took ten grains of iodide of potassium with quinine mixture three times a day. She was seen two months ago, and described herself as being quite well, and it was noticed that her voice was much improved. Mr. Bryant remarked that medicinal treatment in these cases was rarely of any value without the operation; where the larynx is the seat of progressive ulceration the cases go on steadily to the bad.

A discussion ensued on this case, in which Mr. Gant, Dr. Rogers, Dr. Silver, Mr. Spencer Watson, Dr. Sansom, Dr. Tuke, and Prof. Wilson, took part.

Mr. THOMAS S. DOWSE then brought forward a patient suffering from Glosso-laryngeal Paralysis. At the age of sixteen he fell from a tree, and the inference was that he fractured the base of the skull; four years after he suffered from sunstroke in Canada. He recovered, and seemed to have general good health until about eighteen months since, when he was one day brought home in a fit, and was insensible for an hour. When consciousness returned his wife said that he stuttered, and he had some difficulty in speaking for several weeks. On the 6th of last January he had another fit, followed by paralysis of the left arm, and spasm of the muscles of mastication, so that the lower jaw could not be depressed more than half an inch. Attempts were made to introduce the stomach-pump tube through the mouth, but the man was so violent in resisting this that the nasal feeding was resorted to. On examining the head a deep furrow of depressed bone was found in the direction of the left parieto-lambdoidal sutures. The man had a somewhat idiotic expression of face. The facial muscle most wanting in power was the orbicularis oris, this condition permitting the constant dribbling of saliva. The method he adopted to take solid food was very curious. He crammed the mouth until it could hold no more, and after the food had become moistened and softened by the saliva, he pushed it with his finger through the isthmus of the fauces over the epiglottis, where it fell into the grasp of the inferior constrictor of the pharynx, whence it was propelled onward by the action of this muscle. From this Mr. Dowse did not think that the inferior constrictor was paralysed. The man was dumb; the only sound emanating from the larynx was a grunt; and although the thoracic organs were healthy, the loss of power in those muscles made it impossible for the patient to take a deep inspiration. Mr. Dowse, in conclusion, drew attention to the fact that

there were two important points open for discussion in this case—(1) the nerves involved in the lesion; and (2) the nature of the lesion itself.

The patient was then brought in, and showed the fellows the manner in which he fed himself. A very interesting discussion followed, and, on the motion of Dr. Harrington Tuke, the appointment of a committee was referred to the Council of the Society.

MARCH 24TH, 1873.

Mr. DAVY exhibited a modified form of Holt's Dilator.

Dr. SANSOM brought forward a specimen of Pulmonary Valvular Disease. He also showed the Heart of a man who had died suddenly; the right auricle and ventricle were very thin, the aortic orifice was large and triangular, and the aortic valve was fenestrated.

Mr. JABEZ HOGG exhibited a set of Eye and other Surgical Instruments, the property of a native doctor in the N.W. Province of Bengal, who enjoyed a high reputation as an eye doctor. They were sent to him by Mr. Calthrop, of H.M.'s Indian Army, who had seen them used on several occasions. The Indian operation for cataract is what would be called in England a rude mode of depression. The operator takes his position behind the patient, and proceeds to hang on the blunt copper hook (shown) to the lower eyelid, more to accustom the eye to the feel of an instrument than to depress the lid. The upper lid is then raised with the fingers of the left hand, and with the lancet-bladed instrument a bold thrust is made about the eighth of an inch from the cornea, through the sclerotic coat. The triangular copper probe is then introduced, and with a circular movement the lens is rapidly depressed. Mr. Hogg stated that the results obtained were most unsatisfactory. He also showed two "button-like" pieces of fused nitrate of potash, used to remove opacities from the cornea.

Dr. ALFRED CARPENTER (of Croydon) then read a paper on some cases of Malignant Pustule which he had met with in his private practice. After detailing the literature of the disease, the author related his own experience, which was limited to five cases, four of which had terminated fatally in five or six days. The fifth was now under observation.

MARCH 31ST.

Mr. MAUNDER showed the Upper Extremity of a Femur removed from a child aged five years; the patient died. He also exhibited the Ends of a Joint forming the Elbow-joint removed primarily from a female aged fifty-one. The back of the elbow had been caught in a jute-carding machine, and the teeth had carried away a large tract of skin and lacerated the neighbouring muscles, but the ulnar nerve had escaped. Mr. Maunder excised the joint, with two inches of the lower end of the humerus to correspond with the loss of integument. The patient progressed uninterruptedly well. He also brought forward the upper end of a humerus removed from a female thirty-five years of age.

Mr. BRYANT showed a specimen of total occlusion of the rectum. The history of the case, including the operation of colotomy and its progress up to Jan. 30th, 1872, are given in a contemporary. The following is a brief abstract:—Miss B——, aged eighteen, had been subject to insuperable constipation for seven weeks. All medicine and food were rejected, and for some time the vomit had been of a yellow colour. The use of rue and turpentine enemata having failed, the ascending colon was opened, and the edges stitched to the external wound on Sept. 6th, 1872. Motions were passed regularly through the artificial anus, and the note taken on the 30th Jan. in the following year says:—At the present time the girl is going about in good health. She has still some straining on the pelvis, and the tumour formed in it is being forced downwards. The patient died of peritonitis on the 21st June, 1873. The post-mortem examination showed stricture of the rectum of a cancerous nature, and tubercles of malignant matter were deposited upon the neighbouring organs; the bowel was impermeable, not allowing even the passage of a bristle.

The PRESIDENT spoke of a case in which colotomy was performed where the patient, who had been suffering from disease of the rectum of a syphilitic character, appeared to be doing well. The operation demonstrated the advantage of removing the source of irritation to the bowel by preventing the passage of fæces over it.

An important discussion followed, in which Mr. Allingham, Mr. Maunder, Dr. Wiltshire, and Mr. Davy took part.

Dr. FARQUHARSON then read a paper on an Epidemic of Roseola or Spurious Measles, which had occurred at Rugby in 1870.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 2ND, 1873.

DR. E. J. TILT, PRESIDENT, IN THE CHAIR.

THE following gentlemen were elected Fellows:—George Chapman Briggs, M.R.C.S.; G. P. Field, M.R.C.S.; J. H. Finegan, M.D. (Liverpool); W. Garton, M.R.C.S.; H. C. Martin, M.B. (Reigate); L. Parks, M.D. (Boston, U.S.); Diego Perez, M.D. (Montevideo); and R. Le Verley, M.R.C.S.

Dr. COOPER ROSE exhibited an infant with malformation of the genital organs. A sub-committee was appointed to examine and report upon the case.

Dr. HEYWOOD SMITH exhibited an artificial jaw or crusher for dividing the funis without tying it. He also showed an improved écraseur.

Dr. CLEVELAND feared that hæmorrhage might follow the use of such an instrument as Dr. Heywood Smith's for dividing the cord.

Dr. E. J. TILT, the President, read a paper

ON THE PROGRESS OF PELVIC PATHOLOGY DURING THE LAST TWENTY-FIVE YEARS.

He briefly sketched the state of ovarian and pelvic pathology since the revival of gynæcology in 1816 up to 1850, when he published his work on Ovarian Inflammation and on Diseases of Menstruation, the main points of the work being embodied in the following propositions:—1. That the recognised frequency of inflammatory lesions in the ovaries and in the tissues that surround them is of much greater practical importance than is generally admitted. 2. That of all inflammatory lesions of the ovary, those involving destruction to the whole organ are very rare, while the most numerous, and therefore the most important, may be ascribed to a disease that may be called either chronic or subacute ovaritis. 3. That, as a rule, pelvic diseases of women radiate from morbid ovulation. 4. That morbid ovulation is the most frequent cause of ovaritis. 5. That ovaritis frequently causes pelvic peritonitis. 6. That blood is frequently poured out from the ovary and the oviducts into the peritoneum. 7. That subacute ovaritis not infrequently causes and prolongs metritis. 8. That ovaritis generally leads to considerable and varied disturbance of menstruation. 9. That some chronic ovarian tumours may be considered as aberrations from the normal structure of the Graafian cells. Dr. Tilt pointed out that the teaching embodied in these propositions was now to a great extent accepted, notwithstanding the adverse criticism of Dr. Rigby, Dr. West, Dr. Henry Bennet, and Dr. Fleetwood Churchill; and the author claimed that what he had thus taught in 1850 had been amply demonstrated, clinically and necroscopically, in the subsequently published works of Aran, Bernutz, Négrier, Gallard, and Siredy. Dr. Tilt particularly noticed the vast importance of peritonitis as cause, sequel, or factor of many pelvic diseases; and he thought we had still to find the origin of that acute peritonitis sometimes met with in connexion with salpingitis (?), and in absence of any disease of the ovaries. Adhesive bands, the result of pelvi-peritonitis, firmly binding down the womb to the rectum or elsewhere, were represented as frequent and remediable, unless they encountered the gradually increasing strain of a pregnant womb; and Dr. Tilt inferred that these strong adhesive bands would render useless, if not dangerous, any long-continued attempt to restore the womb to its right position by intra-uterine pessaries.

Dr. EDIS regretted that the treatment of ovarian disorders had not received sufficient attention. He believed we were still very much in the dark as to any efficient mode of dealing with them; their relation to primary uterine disease was in many instances unquestionable, and by a judicious treatment of this the ovarian discomfort was also removed.

Dr. CLEVELAND said that definite information was needed for determining where ovarian irritation, as it is called, ended, and subacute ovaritis began.

Dr. TILT, in reply, said he was quite aware that there was much to be desired in the treatment of ovarian complaints, and he agreed with Dr. Cleveland that diagnosis was the weak point in ovarian pathology; for it had occurred to the best observers to be convinced they were treating an enlarged ovary, which was, however, shown to be an abscess of the distal end of the oviduct when the body came to be opened.

Dr. G. G. BANTOCK read a paper

ON THE PATHOLOGY OF CERTAIN (SO-CALLED) UNILOCULAR OVARIAN TUMOURS.

The author's attention was drawn to this subject (1) by a post-mortem specimen, for which he was indebted to Mr. Spencer Wells; and (2) by a specimen shown to this Society by Dr. Meadows in February, 1872 (reported at p. 39, vol. 14 of the Transactions), which he regarded as one of cystic disease of the ovary. In this specimen the ovary was "perfectly independent" of the single cyst, which was, as it were, developed in the folds of the broad ligament at the root of the ovary. The Fallopian tube encircled the cyst for at least half its extent. He accounts for its origin thus. It is not difficult to conceive the possibility of some occasional interference with, or perversion of, the process, by means of which ova, instead of developing towards the free surface of the ovary, take a contrary direction, and work their way towards the attached instead of the free border of the organ; and he added that the large cyst was lined with an epithelial or cellular layer, precisely similar to that which was found in the interior of the Graafian follicles or cavities, which are indicated on the surface of the ovary. His own specimen presented on one side an admirable example of a parovarian cyst as large as the ovary, this organ being healthy, and on the other one as large as a field-bean. The author passed in review what was known of the anatomy of the parovarium, pointing out that the tubules of this organ were lined by epithelial cells. He quoted Dr. Farre to the effect that fluid sometimes collects in the tubules, probably constituting those larger accumulations to which the term dropsy of the broad ligament has been applied. As to the pathology, he had been unable to find any reference to it in recent works beyond that of Dr. West in his lectures on the Diseases of Women, who denies the increase of parovarian tumours to such an extent "as to be distinguishable during life," or exceeding the "dimensions of an apple." In disproof of this assertion the author referred to a case recorded by Mr. Spencer Wells, No. 93, whose description left no doubt as to its parovarian origin, to a specimen laid before the Society by Dr. Wynn Williams, to Dr. Keith's case, No. 12, and to a case quoted by Mr. Clay in his appendix, "as a cyst in the broad ligament, half an inch from the left ovary, twenty-four pounds in weight; ovary healthy." All these far exceeded the dimensions allowed by Dr. West. The anatomical relations of the cyst explained this extensive growth, for it lies in loose connective tissue, abundantly supplied with bloodvessels, and is provided with a secreting apparatus, which keeps pace with, and is a necessity of, the increase of size. Returning to Dr. Meadows's explanation of the mode of origin of the cyst in his specimen, he pointed out that the Graafian follicles are absent from the deeper part of the ovary (Quain and Sharpey), and that it is contrary to a physical law that the follicle should pass in the direction of greatest resistance—that is, towards the hilum, and he regarded it as an assumption unsupported by any known facts. He consequently arrived at the conclusion, that all cysts in the immediate neighbourhood of the ovary, when this organ remained healthy, were of parovarian origin. He was not prepared to allow any weight to the statement regarding the characters of the epithelial layer on the interior as diagnostic, for there is no one form of epithelial cell peculiar to ovarian growths. Dr. Bantock then referred to the anatomical relations of these cysts, how in one case they are so closely attached to the ovary as to appear to form part of it, as in his own specimen, and how at another a space is left between the cyst and the ovary, and how these differences were accounted for by the site of the commencement of the dilatation of the parovarian tubule—that is, whether near the ovary or near the Fallopian tube. In all cases the Fallopian tube partially encircled the cyst, being drawn out to the length of a foot or more, while its calibre was greatly enlarged. Of this Dr. Meadows's case furnished an admirable example; this was illustrated by diagrams and the reason of it explained. The author then referred to the current views as to single cysts of the ovary, expressing his conclusion, from extensive observation, that there was no such thing as true unilocular or unifollicular disease of the ovary. Assuming that hyperæmia and thickening of the ovarian tunic covering a Graafian follicle was the starting point of cystic disease, and that an ovary always contained follicles in various stages of growth towards maturity, he pointed out that this hyperæmia and thickening were not confined to the portion overlying one follicle, but involved the whole coat, and that several follicles became involved in the cystic degeneration. It was true that in the last stage of the disease it not unfrequently happened that a really unilocular cyst was found, but only as the result of the breaking down of the septa, which he illustrated by specimens, in which the openings varied from the size of a pin's head to the diameter of an inch or more, onwards to the complete disappearance of loculi whose presence at a former time was indicated by fibrous bands on the interior of the cyst. These were therefore multilocular cysts becoming unilocular. He said that, considering that we were dealing with an organ consisting of some half-dozen tubules, it was matter of surprise that the disease so often assumed the monocystic form. He was, however, enabled, through the kindness of Mr. Spencer Wells, to present an example of bilocular disease of this organ, and there was this invariable peculiarity, that the ovary was quite healthy, and contained a recently-ruptured Graafian follicle. This had a distinct bearing on the theory of the origin of part of the menstrual fluid, for it was evident that if any blood were derived from the ruptured follicle, it could not possibly have escaped by the Fallopian tube, which was distant several inches, and should then have been found in the abdomen, which was not the case. A very characteristic peculiarity of the parovarian cyst was due to its anatomical relations; thus it would be found that the outer coat could be stripped off entire with the greatest facility, thus converting the cyst into distinct bags, the outer retaining the ovary, while in the case of the true ovarian cyst this was impossible. In the former case the outer coat was formed by the peritoneum, while in the latter it consisted of the tunic of the ovary itself, which in the healthy organ adheres very closely to the subjacent structures, and by the repeated rupture of Graafian follicles and subsequent cicatrisation becomes more intimately connected with the tissues immediately beneath, owing to the absence of a layer of connective tissue such as exists in the folds of the broad ligament in which the parovary lies imbedded.

Dr. EDIS thought Dr. Bantock had scarcely proved that all ovarian cysts were multilocular originally, and only became unilocular by the breaking down of minor cysts. The large specimen shown failed to prove that there had been a series of secondary cysts, although there certainly were what appeared to be fibrous bands stretching across the inner surface. A more minute examination was required.

Reviews and Notices of Books.

Cooper's Dictionary of Practical Surgery and Encyclopædia of Surgical Science. New Edition. By SAMUEL A. LANE, Consulting Surgeon to St. Mary's and to the Lock Hospitals; assisted by various Eminent Surgeons. In Two Volumes. Vol. II. London: Longman & Co., Simpkin & Co., &c.

[FIRST NOTICE.]

THE second volume of the present edition of Cooper's Dictionary is now before the profession. The plan adopted by its editor, Mr. Lane, in this, as in the first volume, appears to have been to retain as much as possible of the original matter, whether historical or professional, and to erase only that which by lapse of time had become obsolete, or which the accumulated experience and the advance of the collateral sciences had shown to be at variance with the

improved knowledge of the day. Throughout the work the new matter has been bracketed, and in every instance the name of the reviser or writer will be found appended to the article undertaken by him; and for all articles to which no name is attached the editor is responsible. Several important and entirely new articles have been added to the present edition. Orthopædic Surgery, Craniotomy, Excision of Joints, Subcutaneous Injections, Vesico-vaginal Fistula, Ruptured Perineum, and Perineal Section have, since Mr. Cooper's time, assumed the position of new branches of surgery. Many articles have been rewritten: Inflammation, Excision of Joints, Cancer, Surgical Affections of the Pharynx, Larynx, and Œsophagus, Skin Diseases, Obstetric and Ophthalmic articles, &c. We observe that no less than 700 pages of new matter have been added, and these additional pages have been thus distributed: 249 have been allotted to new articles, 284 to those that have been rewritten, and 171 have been consumed in revising the remaining individual articles. Mr. Lane has had associated with him in his editorial labours many eminent and able writers, who, for the most part, had already distinguished themselves in the branches of surgery they had undertaken. At the commencement of the second volume will be found a succinct and authentic biography of Samuel Cooper. After these preliminary remarks we shall at once proceed, alphabetically, to the consideration of some of the principal articles in the present volume. Nor can we select a more important article for our first notice than that of Inflammation, by Dr. Robert Druitt.

This long article, extending to above 140 closely printed columns, will not disappoint those who look for a full and detailed exposition of the present state of knowledge on the most important subject of Inflammation. Its chief fault is a want of orderly arrangement, the latter parts of the article seeming like a repetition, completion, or almost rectification of some of the earlier parts, as if they constituted a very long supplement; and the numbering of the pages also seems to show that much additional matter must have been inserted when one part was already printed. But these defects are, doubtless, due to the difficulty of presenting the most recent additions to knowledge in a work which must occupy a long time in printing; and we cannot complain of an arrangement which has given us the admirable historical chapter of which we shall speak presently.

In commencing his subject, Dr. Druitt does not shirk, though he admits, the difficulties of definition; but says of inflammation that it is "a diseased process, a perversion of growth and nutrition, with hyperæmia and exudation." This he afterwards speaks of as defining it as to its accidents, not defining it as to its essence, which latter is impossible. This definition is discussed and explained rather incidentally than explicitly in the long account which follows of one of the standing controversies of surgery, the relation of inflammation to repair. Hunter's doctrine was that repair might occur (by the first intention) without any inflammation, and that this in its mildest form—the adhesive—was only a substitute for union by the first intention. This doctrine was, however, forgotten or set aside by the surgeons of the next generation, such as Astley Cooper, who taught that no wound could be repaired without inflammation. In declaring himself on the side of Hunter, Dr. Druitt is moved both by theoretical views of what is intrinsically probable, and by considerations of practical convenience. We feel compelled to agree with his conclusions, though it may be for somewhat different reasons.

All the knowledge lately accumulated regarding the minute processes of repair tends to show that it has its own laws, and is by no means subordinate to inflammation. At the same time we must point out that this is a different thing from asserting, as the author does, that inflammation only disturbs and hinders repair, being "a process of disturbance, disease, disquiet, and disorder." It may after all be, though not essential to repair, in some cases auxiliary to it, by inducing a more intense hyperæmia, or more copious exudation. It must be admitted that when these processes are particularly active we have the state of things called inflammation. The term will then denote the intensity or energy with which certain processes go on, rather than any one special process; and if this be true, there is more propriety in using the word in an adjectival rather than a substantival sense, and calling processes, whether of repair, physiological development, new growth, &c., inflammatory, when they reach a certain pitch of intensity or violence. Nor is this wholly inconsistent with the conclusions of the first section of the article.

The remainder of what may be called the first part of the article (Sections 2 to 7) calls for little special remark, since what seem to be its omissions are in great part supplied by the eighth section (Theories and Literary History). Even there, however, we do not find a quite satisfactory account of one important subject—the temperature of inflamed parts. The results of Simon and Montgomery, which appeared to disprove Hunter's conclusion that the heat of inflamed parts does not exceed that of the blood, are given as the latest and conclusive ones (p. 13). But if we are to be on the side of the latest experimenter, we must not forget Jacobson and Bernhardt, who in 1869 came to an opposite conclusion. If they are right, Hunter's doctrine will have to be maintained.

All the foregoing sections seem to be, in a sense, preliminary to the eighth, which, under the title of "Literary History and Theories of Inflammation," gives a very complete *résumé* of the most important views which have been held about inflammation, and records very fully the later observations of the German school. Though professedly a history, it is really rather an exposition of the whole subject on a historical basis, and as such might even be substituted for some of the earlier portions of the article.

We cannot do better than give a short abstract of the contents of Dr. Druitt's historical sketch. Surgical opinions respecting inflammation are divided roughly into seven classes, as follows:—

"The first is that of ancient surgery, more particularly as represented by Galen, whose doctrines, classifications, and very words were copied by succeeding writers, and only became obsolete in the time of Cullen and Hunter. The second began with the beginning of modern science in the seventeenth century, and, adopting a vitalistic or pneumopathological basis, continued down through Cullen and Hunter to Cooper, Abernethy, and the great surgeons of the last generation. A third may comprise the early microscopic school, by which the capillaries were chiefly studied. A fourth coincides with the development of the 'cell' doctrine. A fifth includes the later ideas of the activity and power of protoplasm or 'germinal matter' independently of the formation or function of 'cells' formally so-called. A sixth will treat of chemical theories. A seventh of the now popular neuro-pathology."

Ancient surgery is exemplified chiefly by Galen, whose opinions on inflammation have to be collected from numerous partial definitions often repeated, though scarcely twice in the same words. The following is one of them: "Inflammation is a swelling, with redness, producing severe throbbing pain." As to the cause of inflammation, it is stated by Galen over and over again to be an afflux or effusion of blood, and its natural consequence corruption and disintegration of the part affected. To these definitions nothing was added by succeeding writers down to the middle of the eighteenth century. The Arabian physicians who continued the Greek tradition, or their European pupils, only copied the ideas and words of Galen, as is

shown in a very interesting manner from the works of Wiseman, "the greatest English surgeon of the eighteenth century."

On this period we will only make one comment—viz., that the term translated "inflammation" is plainly used in a different sense from that in which we now use the word. Galen, and Wiseman too, meant something concrete—an object, a tumour, a *phlegmon*—not an abstraction, a process; and we could wish it had been possible to trace how the conception of inflammation as a process was gradually introduced.

In treating of the doctrines which came to light in the century between Wiseman and Hunter, it is remarked that they all "suppose the existence in the body of some agent, more or less distinctly endowed with consciousness and reason, which takes cognisance of impressions upon the senses, and of injuries, poisons, and other causes of disease, and then sets up actions for the preservation and recovery of the individual. Such an agent was the 'nature' of ancients and moderns, the *vis medicatrix naturæ*, vital spirits, anima, or Archæus of different authors." This is true of Van Helmont, Willis, Morton, Stahl, De Sauvages, &c. Hunter's views of inflammation, difficult as they are to define, clearly rest upon the same basis—viz., upon the assumption of a conscious and intelligent entity ruling the animal body, which he usually describes as the "principle of life." Thus his conception of inflammation is teleological; it is not a disease, but a salutary operation consequent on violence or some disease. Or, again, it is an action produced for the restoration of the most simple injury in sound parts which goes beyond the power of union by the first intention. Little advance was made in the forty years following Hunter's death (in 1793), his doctrines being held in English schools in unabated reverence; but still observations were made by what Dr. Druitt calls the early microscopic school, which prepared the way for subsequent discoveries. Of their doctrines the key note is found in the assertions of John Thomson and C. H. Parry that "inflammation has its principal seat in the capillary vessels." The next important period is that of the "cell" doctrine. The theory of Schwann was soon applied to pathology by Bennett, Lebert, and others. The importance of the white blood-corpuscles was seen by W. Addison, Williams, and Waller; that tissue elements have a life independent of the circulation was demonstrated by Goodsir, Redfern, and (latterly) by Lebert. Next the brilliant generalisations of Virchow receive attention, and we here note the only important hiatus in Dr. Druitt's catena of authorities. He places Virchow by himself as a sort of pathological Melchizedec, without father, without mother, without descent; and yet his doctrines are related by strict filiation to those of both English and German observers, who bridge the interval between Schwann and himself. Remak may be an example of the one and Goodsir of the other. Nor, again, did these doctrines spring full-blown into existence with the lectures on cellular pathology in 1858. Scarcely any important element of the theory had not been previously published in the early volumes of Virchow's *Archiv* or in the Würzburg Memoirs, where may be also traced the historical sequences just spoken of. The main points of the cellular pathology, the independent life of cells, the genesis of new elements (*omnis cellula e cellulâ*), the importance of connective tissue, the source of fibrin, &c., are well shown by Dr. Druitt, but need not here be enlarged upon.

In the next period the cell doctrine of Schwann was shattered or profoundly altered, while coincident and partially corresponding changes took place in pathological doctrine. Instead of a cell-wall and contents, we have now a mass of protoplasm endowed with independent life, and on this basis Beale (to whom, with Schultze and others in Germany, the change of conception is partly due) has constructed his well-known pathological and physiological system of contrasting germinal matter and formed material. Now, this change in the meaning attached to the word cell (for that is what the change virtually amounts to) does not, we may remark, materially conflict with Virchow's cellular pathology, in which it is of no consequence whether the active elements of growth are cells or nuclei; and even Beale's system, discrepant as it is in many particulars, is very largely founded on the same original conception as the cellular pathology. But a far more formidable conflict was impending over Virchow's doctrine when Cohnheim's famous memoir (of which an excellent account is given) was published in 1867. In this was definitely established the fact of emigration of white blood-corpuscles, already announced to deaf ears by W. Addison and Waller. Here, however, we must plead for the insertion of one name, or rather for the earlier insertion of that of von Recklinghausen, for without his classical memoir on migratory cells, Cohnheim's memoir could hardly have been written, or, at least, not have assumed its actual shape.

It was thus clearly established that there was a source of pus-corpuscles independent of Virchow's proliferation of the tissue elements; and when in a second memoir Cohnheim denied all share to these elements in the production of pus, it seemed as if the cellular pathology had received a very damaging blow indeed. Help, however, came from a remote quarter, and it was the researches of the Vienna pathologist Stricker, and his allies, that clearly established the actual occurrence, at all events, of tissue proliferation in inflammation. These researches are very well summarised, as are also those conducted at Graz by Ryneck; and the article may be very well referred to by those who have not access to the original papers.

The general result is well described by Dr. Druitt as a harmonious reconciliation ("unusual amongst physiologists") of opposing views. Interstitialism, or the exudation-pathology of Bennett, Lebert, and Rokitansky, receives its justification, only that by exudation we now understand, not effusion of plasma or amorphous material only, but of formed elements. Texturalism, again, the doctrine the noted names connected with which are Goodsir, Redfern, and Remak, and which culminated in Virchow, is not put out of court; and, finally, we may say the older *vascular* doctrine, though no longer supreme, finds its place in virtue of the conclusion of Ryneck (for which Burdon-Sanderson is called in evidence) that exudation in the widest sense depends on changes in the vascular walls.

This summary of the existing state of knowledge completes, as it must do, the historical summary. Two sections are then devoted, one to chemical the other to neuro-pathological theories, into which we cannot now enter. A few words must, however, be said about the important and interesting section on treatment. Although not formally historical, here, too, the historical mode of treating the subject gives much interest to it, and produces a certain wise tolerance and judicious eclecticism. Dr. Druitt treats in succession of preventive, expectant, and curative treatment. We have some good remarks about the abuse of expectant treatment. "There is a great deal of cant uttered about nature, as if nature never let patients go on from bad to worse, and as if 'nature' in the mind of any reasonable being meant any more than 'matter of fact,' or 'what is'; neither can it be denied that the efforts of nature are often insufficient, as Hoffmann well showed, and sometimes as fatal as the worst achievements of meddlesome physic." This is a very needful caution, more especially at

the present day, when the tide of opinion happens to flow rather strongly in the direction of "expectant" medicine; but we must not forget the bearings of that most valuable scientific achievement of the present day, the doctrine of evolution. We inherit a physical frame, which is what it is in virtue of having already passed, in the persons of our ancestors, the ordeal of the common diseases and injurious influences of ordinary life. Every baby is born with the physical experience of a veteran in disease. This is what gives us so strong a conviction that the body is constructed with the power of repairing injuries and compensating morbid disturbances of function, provided the injury or disturbance have not passed certain limits, to know which is the problem of practical medicine. But Dr. Druitt does not let either metaphysics or his dislike of metaphysics interfere with his good sense. His discussion of bleeding is most instructive. Here, again, the historical method of inquiry is the great secret of arriving at practically wise principles. We learn that neither excessive bleeding nor excessive fear of bleeding, neither change of type nor a belief in such a change, are new. The author concludes "that there is evidence of change of opinion as well as of change of type to account for the cessation of bleeding. But this cessation is not peculiar to the present day. And it is well shown by Dr. G. W. Balfour that bleeding and not bleeding are recurrent phenomena."

Treatment by means of cold receives a fair amount of consideration, but by no means too much. There is severity as well as truth in the remark that, though cold affusion was used largely at the beginning of this century, "it is more troublesome than the administration of medicines, and therefore went almost out of use."

The ligature of arteries for relief of inflammation, introduced by Professor Campbell, of New Orleans, is favourably mentioned; but the simpler course of cutting off the arterial supply by digital compression is thought more likely to gain general adoption.

There are very good remarks on the use of drugs, on alcohol, on counter-irritation, &c., which we have no space to notice.

At the end of the article is a very full exposition of Dr. Laycock's neuro-pathological doctrines, doing them at least adequate justice. We confess that the following sentence is that with which we find ourselves most in agreement:—

"It is no disrespect to the distinguished Edinburgh professor to say of his views, what one inspired Apostle said of another, that they contain δυσνόητά τινα—some things hard to understand."

But it is time to take our leave of the apostle of common sense and historical eclecticism; and we can only say that the author of the "Surgeon's Vade Mecum" has established a fresh claim on the gratitude, not of students only, but of all medical readers.

Foreign Gleanings.

TREATMENT OF FEVER BY MEANS OF COLD ENEMATA.

DR. KEMPERDICK makes use of an œsophageal sound with a double-current contrivance, introduced high up into the rectum. At the extremity of the sound is attached a bladder, or portion of the larger bowel of an ox, doubled in two and ending in a pouch. One of the tubes of the sound is connected with an irrigator, whilst through the other tube passes a No. 5 English sound, which brings back the water injected into the reservoir attached to the end of the sound. This apparatus is used when the temperature reaches 39° (centigrade), and the irrigation is prolonged from half an hour to one hour. The temperature of the water injected must be first 15° (centigrade), after which it may be brought down to 11° or 12°. A first trial, made on a woman of twenty-one years, affected with typhoid fever, was entirely successful. Since then frequent applications of the apparatus have enabled Dr. Kemperdick to state the following results:—1. During the application the temperature is lessened by nearly 2°. 2. Consecutively, the temperature is again lessened by 1°. 3. The application of the apparatus does not present any difficulty. In concluding, the author states that there is need to improve the apparatus.—*Berlin Klin. Woch.*, No. 10, 1873.

TREATMENT OF CONTAGIOUS CHARBON.

In the above cases Dr. Wasservogl advocates the employment of local means, as well in those instances where there exists infection of the whole organism, as in those where the general disorder is only symptomatic of the local affection, or simply depends on symphathetic phenomena. He recommends cauterisations, by means of the concentrated mineral acids or actual cautery, combined, when the disease persists, with incisions, intended to carry the caustics deeper into the flesh. During the first days of treatment, dressings with carbolic acid and hot aromatic fomentations must be employed, whilst a general antiseptic and tonic treatment is instituted. The author quotes a case of successful employment of this mode of treatment in a pregnant woman, who, after handling the body of a diseased ox, was affected with two large carbuncular eschars on the left cheek.—*Allg. Wien. Med. Zeit.*, Nos. 8 and 10, 1873.

TREATMENT OF CYSTITIS.

In an inaugural thesis recently published by Dr. Pouliet, and in which the author especially supports the views and methods of treatment adopted by Dr. Guyon, of Necker Hospital, the following more important conclusions are stated by the author:—"In cystitis, and especially the acute form, the inflammation is often limited to, or, at least, is more intense at, the neck of the bladder. The employment of nitrate of silver should be preferred to other means for treatment of the local inflammation: the substance is especially successful in deep chronic urethritis with cystitis of the cervix, provided it be applied to the very situation which it is intended to modify, by means of a special instrument. In chronic cystitis of the cervix, the method of instillations performed by means of Dr. Guyon's apparatus should be preferred to the use of the porte-caustique, because it is more easily practised, affords the same results, and does not expose the patient to any risk. This method is especially useful in acute cystitis of the cervix, particularly when the inflammation is well limited to the neck of the bladder, and does not extend very deep.

AMMONIA IN WORKSHOPS AS A PREVENTIVE OF MERCURIAL POISONING.

In a recent communication to the Paris Academy of Sciences, Dr. Meyer made known the excellent results which he had obtained in preventing all symptoms of mercurial poisoning in the looking-glass manufactory of St. Gobain by sprinkling the floor with ammonia. He cannot explain the preservative action of ammonia, and it was accidentally that he discovered this effect; but he states that during the five years that it has been employed at St. Gobain, not one case of poisoning has been observed among the workmen, whilst there is a marked amendment in the symptoms of those who were previously affected. About half a litre of common liquid ammonia is simply to be sprinkled on the floor of the workshop every evening after the day's work.

CONVULSIONS IN AN INFANT, DUE TO ABUSE OF ALCOHOL IN THE NURSE.

M. Vernay relates, in *Lyon Médical*, a very striking case of the mischievous consequences which may result from the abuse of wine-drinking in a nurse. A child was taken with convulsions, and during five days all sorts of means, like calomel, bromide of potassium, the hot bath, musk, belladonna, &c., were uselessly employed. M. Vernay was eventually told that the nurse drank six to eight glasses of French wine in the day, and had some more at night. It occurred to him that the convulsions in the child might be due to the quantity of alcoholic liquid thus absorbed by the nurse. The wine was ordered to be stopped, and the convulsions ceased immediately after.

THE LANCET.

LONDON: SATURDAY, APRIL 26, 1873.

WE have tried hard to get up some feeling of interest in what is now known as Mr. HEADLAM'S Bill, or the Medical Act (1858) Amendment Bill of the British Medical Association, or rather of the Reform Committee of that body; for we cannot believe that the Association will take much interest in a Bill which will perpetuate so many of the evils of the present Medical Council and of nineteen equal and rival authorities. No doubt the tendency of an Association is to do very much what its Committee advises, especially in a matter like this. But we venture to hope that the members of the Association will be induced, before they determine to ask for it any parliamentary support, to consider two or three points. Be this as it may, we must entirely withhold our approval of the measure. It is miserably inadequate to the wants of the case. It is the old clothes of the Government measure with a patch of new here and there, which only set off the poverty of the whole garment. We are not unwilling to do justice to the labours of the Reform Committee. They have been many and great. But after all that has happened in the way of abortive attempts to construct schemes for Conjoint Boards in the last few years, it is disappointing to find that the Reform Committee of the Association is just where it was three years ago, and has no other idea of the solution of the one-portal difficulty than it had then. It cannot be imagined that the Reform Committee is in search of mere glory. There is none of this result to be got out of a measure which is a mere paraphrase of that of the Government in 1870, barring a proposition for an alteration in the size of the Council, which we shall consider more particularly immediately. If, on the other hand, the Committee is really anxious for the establishment of the one-portal system on a satisfactory basis, as we give its members all credit for being, then we hope to convince even them that they would not secure it by their Bill, and would ultimately disappoint the profession. Let us look for a little at the main proposals of this measure in the light of all that has happened since 1870.

1. *The Bill proposes to enlarge the Medical Council.*

Now is there a man outside the Reform Committee that wants to see any enlargement of a body that is already twice too large? The Council now consists of twenty-three members: seventeen of whom represent bodies, either corporations or universities; six of whom represent the Crown. Mr. HEADLAM'S Bill—and this is the sole peculiarity of it—proposes a Council of twenty-nine, or, supposing the President always to be selected from outside of the Council, of thirty! This is a fine prospect: a Medical Council enlarged, with enlarged premises, and an enlarging income, and a lessening amount of work to do. We have said that the Committee has stood still and has disregarded the lessons of three years. But it has actually gone backwards. Three years ago it was full of courageous determination to demand the disenfranchisement of bodies whose *raison d'être* seems to have lapsed with the progress of time. The representation of these bodies was to cease, and so some room was to be made for the new members directly representative of the profession. Now in this bland Bill every body is to remain, and the practitioners of the country at large are to be gratified by six representatives. The practitioners of the country are practical men. They like bodies that will work and not talk; and they will see no guarantee of increased efficiency in a Council that still gives an individual representation to every separate university and corporation. Even the direct members would be overborne in such a Council. And the experience of the profession since 1870 of the faults of the Council as a business body must have made the conviction universal that a differently constituted and a smaller Medical Council, such as was proposed in THE LANCET Bill of 1871, is the very foundation of medical reform.

2. *The Bill proposes to make One-portal arrangements by Conjunction of Bodies.*

How can two walk together unless they agree? But the Council proposes to make them agree. The bodies in England, Ireland, and Scotland have been trying to agree among themselves, and they have failed. But, says the Reform Committee, "we shall make you agree." This is just the thing that even Legislatures cannot do; and, to do the Reform Committee justice, they anticipate the case of the bodies being incapable of agreeing, and provide for it by giving power to the General Medical Council to frame and propose to the Privy Council a scheme for confirmation, the General Medical Council itself being just an embodiment of the "authorities." We cannot give the dreary particulars—and it is unnecessary, for they are all as old as 1870—of the innumerable steps that are to be taken to form schemes, to give time for objections to be made by all the bodies, to give the Privy Council power to reject schemes. After late experience, we say it is monstrous to expect agreement among nineteen bodies, or to think that the element of compulsion would make the working of such a system more satisfactory. The experiment of conjunction has been tried, and it ought to be abandoned. The nineteen bodies are no doubt very important institutions, but they were never meant to act conjointly; and we prognosticate failure, and dissatisfaction to all the bodies concerned, as well as to the profession and the public, if the attempt to make them conjoin is persisted in. The Government may feel a temptation to rid itself of this troublesome question by accepting a Bill which is virtually its own; but we warn it that it will not solve the questions involved. Already shrewd observers are beginning to see that even the principal bodies themselves will not be satisfied by the arrangements contemplated in conjoint schemes; and if the time should come when conjoint schemes shall be imposed on them by force of law, we anticipate inconveniences which would raise the whole question again, and require the Government to do its own duty. But we need not say that we do not fear a Bill becoming law which makes proper licensing boards depend on nineteen bodies, and which enlarges the General Medical Council. The profession itself—

may we not say the British Medical Association—will save us from such a piece of legislation, which all recent experience shows us would be absurd.

IT is to be feared that the final discussion on Tubercle, at the Pathological Society, leaves us as far as ever from a definite conclusion which might satisfy all parties as to the relations of tubercle and phthisis. Nevertheless, this last debate was a very interesting one, and well deserves to be remembered.

The opening speech of Dr. C. J. B. WILLIAMS was a very natural remonstrance against the whole of the modern phraseology employed in describing tubercle. To those physicians, of whom there was none more illustrious than Dr. WILLIAMS, who led the way in introducing and modifying the doctrines of LAENNEC in this country, nearly fifty years ago, there are certain modes of thought about tubercle which are exceedingly distasteful. To call a tubercle a "growth" is, to their minds, a serious misdemeanour: tubercle is a "low" and "sneaking" product which ought to be branded with some opprobrious epithet, such as "cacoplasm," or the like. No one can fail to see that all this is very much a matter of sentiment. Nor did Dr. WILLIAMS's clever adaptation of modern microscopic discoveries to his own formerly expressed views appear to carry conviction of its justice to the minds of his auditors. Indeed it was apparent, as Dr. FOX hinted in his reply, that Dr. WILLIAMS had scarcely appreciated the nature of the resemblance (which is really not identity) which modern observers have pointed out between certain elements of gland-tissue and the structures more especially designated by custom as "tubercle"; a considerable portion of his argument seemed therefore to rest on a basis that was scarcely sound. It is, at any rate, too late in the day to prevent pathologists from speaking of the miliary substance as a growth; and the attempt to justify its exclusion from this category on the ground of its exceedingly *perishable* nature cannot be sustained in face of the numerous proofs adduced (especially by Dr. GREEN) to show that the natural tendency of adenoid deposits in the lung is towards fibrillation and quiet obsolescence.

The next speech that we shall notice (though not the next in order of occurrence) is the singular diatribe of Dr. CRISP, who dragged in illustrations from his favourite subject, comparative pathology. By the time he had reached the affecting story of the lizard whose friends injudiciously put him in a warm bath, which brought on hæmoptysis, most persons in the room were beginning to find the orator extremely funny. Nevertheless, Dr. CRISP did point attention (and, as he rightly claimed, not for the first time) to an exceedingly remarkable fact—namely, that the Rodentia, in a state of nature, almost *never* suffer from consumptive disease. This fact, which Dr. CRISP's probably unparalleled experience in animal dissection at the Zoological Gardens has placed beyond doubt, will be presently adverted to as a vital datum of the highest importance.

An important reinforcement to Dr. FOX's side of the general question, if not to the whole of his pathological views, appeared in the person of Dr. JAMES POLLOCK; and we cannot but make this gentleman's speech the occasion of a small digression on speaking at medical societies in general. The tubercle debate has again illustrated—what was even more forcibly shown by the discussion last year on pyæmia—that there are lamentably few, even of our abler physicians and surgeons, who know how to express themselves with that brevity and clear directness which are the very essence of scientific debating. It was, indeed, high time that the custom of formal debates on special subjects was naturalised amongst us; and we trust that it may not be long before a number of medical speakers may be found possessed of what must at present be described as the very rare debating faculty of Dr. POLLOCK. Although we are quite unable to endorse the opinion of Dr. POLLOCK that the phenomena of phthisis always possess an essential uniformity, clinical as well as anatomical, underneath their superficial differences, we must acknowledge that his admirably lucid words are reinforced by an unusual amount of experience and careful observation, of which he has given proofs in his very admirable work on the Prognosis of Consumption. Nevertheless, we cannot suppose that Dr. POLLOCK is capable of placing himself with entire impartiality at the standpoint necessitated by the most modern observation. Without the least wish to detract unfairly from his *prestige* in the present discussion, we cannot avoid the remark that Dr. POLLOCK's rejection of *phthisis ab hæmoptoe* as an actual pathological occurrence inevitably raises doubts as to his authority on several other matters which have been brought into prominence by NIEMEYER and his school.

The speech of the evening, however (Dr. FOX's reply excepted), was certainly that of Dr. T. H. GREEN; and we will take the opportunity to say that, if any considerable number of our younger pathologists are working as effectively as this gentleman, there is hope of a future for the English school of pathology that will give it a reputation considerably superior to that which it has enjoyed of late years. To a great extent, of course, the speech was but a condensation of views already expressed by Dr. GREEN in some papers published last year in a contemporary. The position which he takes up, and which he enforces with microscopic testimony of an important kind, is this:—The small-celled growth in the alveolar walls, and the larger epithelial-like cellular masses within the cavity of the air-cells, do not stand to one another in the relation of cause and effect; they are both the product of a common cause, of one and the same irritating agency. The greater the intensity of the inflammatory process, the more extensive is the proliferation of the large cells within the alveoli; the less its intensity, the more do its effects tend to limit themselves to the over-growth of small cells in the alveolar walls. The small cells in the alveolar walls are, *per se*, likely to pass more and more into the fibroid state, by the growth of the reticulum; but for the epithelial masses within the alveoli there is no salvation by processes of *growth*. These last are removed from any source of effective nutrition, they are therefore bound to die; and their only chance of harmlessness is that, in proportion as they pass through the dissolution of fatty degeneration, absorption may go on *pari passu*. But if the original irritation have been very intense, then the epithelial prolifera-

tion will have been enormous, and not merely are the air-cells filled, but they are choked with this material, which strangulates the alveolar capillaries by its pressure, and thus at once prevents absorption and sets up degenerative processes. Locally speaking, therefore, and from an anatomical point of view, it is by no means specially the adenoid, but, on the contrary, the catarrhal-epithelial elements, which are more effective in the production of a rapid destruction of tissue—a *phthisie galopante*, in the true sense of the term. As for the production of crops of miliary deposit, *that* is regarded by Dr. GREEN as altogether an infective process; and whether seen on the small scale, as an adjunct of ordinary phthisis, or on the large scale as marking the occurrence of fatal so-called acute tuberculosis, he supposes it to possess an invariable basis in the existence of some "*infections-heerd*" in the shape of a catarrhal or other inflammatory deposit. It is worthy of remark that Dr. GREEN, though declining as yet to pronounce a final opinion on the nature of the multinucleated giant-cells which (noticed long ago by VIRCHOW) have been prominently brought forward by SCHÜPPEL, has not found reason to think them distinctive of tubercle, but rather believes them to be simply the results of chronic indurative inflammations in tissues intimately connected with the lymphatic system. The ultimate result of Dr. GREEN'S researches and reasoning would thus appear to be that there is no anatomical structure which can be fitly established, under the name of tubercle, as the proper basis of phthisis in every kind.

It is mortifying to think that we cannot do any sort of justice to the remarkably able reply of Dr. WILSON FOX to his various critics; but the study of his own words, as given at full length in our report, will enable the reader to perceive the drift of his arguments far more clearly than we could present them in a few hurried lines. He cannot be denied the merit of victory, in a certain sense, in this debate, for he has maintained to the last an unwavering front; while (save in a few negative points) his opponents have no common faith, but are divided among themselves. The most important point of agreement against him is the opinion of two such authorities as Dr. BASTIAN and Dr. GREEN, arrived at by very different and independent routes, that the word "tubercle," so far from forming an appropriate anatomical basis for all varieties of phthisis, ought to be altogether banished from use; although, clinically, Dr. GREEN would retain the term "acute tuberculosis" to describe the disease which proves so rapidly fatal under circumstances of fever of a peculiar kind, and with (usually) acute inflammation of the brain. There was nothing, however, of the victor's assumption in Dr. Fox's reply, which was as modest as it was elaborate and careful. He could not but feel that it was all very doubtful ground, and that scarcely more than the first sparks of illumination had been struck out in the clash of contest; and we are doing him the barest justice when we express the belief that his mind is fully open to conviction, even though further research and reflection should seem to necessitate a change in his general point of view. We must leave his own very able speech in reply to stand for itself, and to modify to any extent that it may the effect of the few concluding remarks in which we must only too hurriedly record our final impressions on the general subject of the debate.

It appears to us that the proposal to rehabilitate the word "tubercle" as the name of a common anatomical basis for all the varieties of phthisis will not stand the test of reason, because—

1. The adenoid element, which Dr. Fox suggests as the touchstone of tubercle, is *not* the cause of the most characteristic phthisical (i.e., destructive) processes in the lung.

2. The word "tubercle" is exceedingly likely to mislead persons who are not constantly engaged in pathological research; for it almost inevitably suggests a particular form and structure of the morbid deposit.

3. Unless the process "tuberculosis" is distinctly understood to be represented solely by the acute febrile disorder which is fatal *independently of lung destruction*, we shall have everlasting confusions between acute miliary tuberculosis and the "galloping phthisis" which is due entirely to the intensity of a merely catarrhal inflammation which, by its intensity, inflicts irreparable damage on the pulmonary tissue. It is quite lately, and in consequence of the present agitation on the subject of phthisis and tubercle, that we have heard more than one person, of no mean status in the profession, speak in a manner which decidedly showed his ignorance of the separation (which nevertheless is absolute) between these two disorders.

4. It is a most significant fact that the very animals—the Rodentia—which are most susceptible of the artificial "tuberculous infection" are almost entirely free from the tendency to ordinary caseation and phthisis of the lung.

While, however, we thus deprecate any return to the practice of calling the lung-deposit in ordinary phthisis (however rapid) by the name of tubercle, we cannot admit that the acute fatal miliary disease is (at any rate in the majority of cases) merely determined by the rapidity of septic absorption from a local inflammatory deposit. Bearing in mind, on the one hand, the numerous post-mortem examinations after fatal "acute tuberculosis" in which nothing has been found which could reasonably be supposed to have acted as a starting-point for the infective process; and, on the other hand, the immense number of children who are chronically catarrhous without ever suffering from tuberculosis; remembering, finally, the fact (as fact we believe it to be) that the lines of family descent are *not* coincident between acute tuberculosis and ulcerative phthisis (whether acute or chronic),—we are compelled to believe that the most important factor in the pathogenesis of the fatal miliary disease is not the septic infection, but some inborn peculiarity of the organism.

Lastly, upon the question whether the word tuberculosis should be retained at all, we must confess to some hesitation. Did we believe that it could be usefully replaced by "granulia" or any other commonly acceptable term for the acute febrile non-ulcerative disease, we would gladly sanction and assist in its total suppression. Unfortunately, the author of the word "granulia"—EMPIS—is himself guilty of the gross confusion of reintroducing the word tubercle to express common caseation and its consequences, as opposed to granular deposits; and this fact naturally suggests the fear that nothing short of the total sup-

pression of the word tubercle can prevent its acting as a perennial source of confusion. The general effect on our own mind is that the word tubercle, as an *anatomical* expression, ought to be entirely disused, but that the word tuberculosis may be provisionally retained to express simply the important clinical facts which are bound up in the acute febrile disease attended with greater or less diffusion of granular deposits, including, nearly always, granulations (usually fatal) of the cerebral meninges.

It is only within the last few days that the very latest manifesto from Germany upon phthisis and tubercle has fallen into our hands.* Dr. AUFRECHT, it will be seen, so far concurs with Dr. BASTIAN that he proposes to substitute the word "granulie" for tuberculosis. Upon a future occasion we may probably take the opportunity of discussing the views put forward in Dr. AUFRECHT'S very able treatise.

THE new Warrant has not been received with any favour by the Army Medical Department; on the contrary, it has caused a ferment of discontent which is easier created than extinguished. Pamphlets and protests have been already published; and we learn that the retrogressive paragraphs in that document have been generally discussed and condemned by medical officers, and that an organisation was being developed for circulating their views throughout the service and the profession with the object of presenting a memorial praying for their repeal. We confess that we are not surprised at the discontent that undoubtedly prevails, and which will only gather force as it goes along. We have never concealed from ourselves that the abolition of the regimental system would be unpopular with the majority of medical officers; but this does not seem to form the prominent ground of their opposition. There is little or no difference between the advocates and opponents of the principle of the new scheme of medical organisation. They are united in condemning both the action taken in regard to it, as embodied in the new Army List, and the objectionable conditions imposed upon the medical officers by the new Warrant. They naturally call to mind the contrast between the generous consideration extended to combatant officers when the purchase system was abolished and the arbitrary spirit manifested in the case of medical officers who have been dispossessed of their regimental appointments by a single stroke of the pen. Nothing can make us believe that this formed part of the original scheme submitted by the medical authorities. It was confidently expected that the carrying out of the new organisation would be tempered with a considerate moderation. So far from the authorities displaying this spirit, they have disestablished regimental officers without any warning or ceremony, treated Her Majesty's commission, which these officers held, as if it were so much waste paper, and unnecessarily inflicted upon an important section of the Medical Service serious pecuniary loss. It is the details of the Warrant, however, that seem to medical officers to bristle with objectionable points. First and foremost, should it be characterised as a Medical Warrant at all? The subordination of the Medical Service to the Commander-in-Chief appears to have been as completely effected as if the post of Director-General had been abolished. We are told that the position of the department in reference to the Horse Guards branch of the War Office is one of the results of the recommendations of the committee appointed for the reorganisation of the different departments of the War Office, to which the War Minister has simply given effect. Still, this introduces a principle which can only tend to degrade the head of the department, and through him the whole service. We have always claimed for the Medical Service that it should be allowed to manage its own affairs free from the shackles by which it has been bound down by military officials. Time has proved that the interests of the two are not only different, but antagonistic. The Royal Warrant of 1858 was rightly regarded by medical officers as their Magna Charta; and on this account, probably, the military element has always manifested its undisguised jealousy and hatred of that Warrant. It was wrung from the army authorities by the force of public opinion; and it liberated the Medical Service to some extent from the control of those who cared nothing for its efficiency and hated nothing so much as the exhibition of any independence on the part of its members. It is monstrous to suppose that the Commander-in-Chief can be any judge of the merits and abilities of doctors; and the power of selecting medical officers for promotion, which this Warrant bestows upon him is admirably calculated to effect the necessary subserviency of medical officers at the expense of the efficiency of the service itself. The right and proper course is the very obvious one of investing the chief of the department with the responsibility of making such selections, recording, of course, the grounds on which he has done so. To encourage the officers of a scientific corps to look to any other than their own head—who can alone be a competent judge of the merits of his subordinates—for their hope of reward, is simply to cut at the root of discipline. It subverts the authority of those with whom this responsibility should unquestionably rest, and most of all in a special service like that of the Medical Department. The fact is, however, that the utterly insignificant official salary conceded to the head of the Medical Service is the very best index we can have of the weight that is likely to be attached to anything he may advance; and as the War-office authorities have thought fit to strip relative rank of the rights and privileges by which it was accompanied under previous Warrants, they must be prepared for the consequences in the competition which will now go on between the army and civil life. The principle of unification has been yielded, but new and responsible duties—and to many very distasteful, because unprofessional, duties—in connexion with the charge of hospital stores, have been imposed upon medical officers, without any commensurate advantages to them; it is alleged, on the contrary, that their position has been, in some respects, degraded instead of being improved. We are informed that some medical officers of fifteen years' service have actually been deprived of a portion of their daily pay under this new Warrant, as an earnest, no doubt, of the hopeful confidence with which they were assured they might look forward to promotion at fifteen years. Meanwhile where is the promised big *Gazette*? And, now that

* Die Chronische Broncho-pneumonie (Lungenschwindsucht) und die Granulie (Tuberculose). Eine Skizze. Von Dr. E. Aufrecht.

we are on this subject, there is one question that we should like to see solved. If the establishment of the upper executive ranks is to be a fixed one, how are the juniors of fifteen years' service to be provided for until vacancies occur in that establishment? May they confidently look forward to the prospect of undergoing a pecuniary loss in the matter of their daily pay? Mr. CARDWELL'S scheme seems to resemble one of those ships on account of which such indignation has been raised against their owners. Before it has fairly started it is found to be overladen with an objectionable deck cargo, which threatens to wreck it altogether. It is surely not too late for Mr. CARDWELL to reassure the department by throwing the objectionable conditions overboard. The principle of his organisation scheme is a good one in itself, but we have no confidence in its working until he has rid it of all legitimate causes of discontent and distrust. With the remembrance of the recent defeat of the Government fresh in his mind, the present War Minister must be painfully aware of the futility of throwing over objectionable clauses at the last moment, when the infection of discontent has spread and grown in force and power. It is to be hoped that some member of the House of Commons may give Mr. CARDWELL an early opportunity of acquainting us with his reading of the new Warrants, which we can only hope will tend to dissipate the distrust they have awakened. We notice one concession in the new Army List, by which the surgeon-majors ranking with lieutenant-colonels are to be junior of the rank *except in the choice of quarters*. Although we have long advocated a general staff system, as tending to create unity of feeling and redress some grievances in regard to foreign service, and as likely to substitute a well-defined position for the medical officer, based on professional claims, in the place of that which rests on the ground of belonging to some distinguished regiment or other, we cannot shut our eyes to the fact that, whatever may be the gain to the service in efficiency or to the State in economical administration, the medical officers will gain nothing by the Warrant. We have previously touched upon the matter of forage and the choice of quarters, in both of which medical officers are much affected by the new changes. If we do not dwell upon those two points now, it is because we do not yet know whether the Medical Service is made the subject of any exceptional treatment or not. It is confidently stated that a new forage warrant will lay down exactly the same principle for all branches of the service alike, and some communications that have reached us would apparently lend support to that statement. We must confess that we should prefer a system of consolidated pay in lieu of the present scale of pay and allowances according to rank. Again, we are told that, under the new military organisation, the commanding officer and all field officers of a regiment will be removable, like the attached medical officer, every five years, their choice of quarters being governed, as heretofore, by the length of their regimental service. Years ago the Army Medical Service was in such a state of unpopularity that it promised to resemble, in the course of time, a derelict ship. To obtain the necessary candidates great concessions were made, and were on the eve of being promulgated. At that moment a large batch of medical candidates put in their appearance from the Irish schools. The work of years was undone. All concessions were at once cancelled. The service, as we assured our readers at the time, would not soon recover the position it had lost. Nor has it. We have not been ungenerous critics of Mr. CARDWELL'S policy. We gave him full credit for the correctness of the principle underlying it and the honesty of his motives. But we feel ourselves bound, in behalf of men who cannot help themselves, to protest against that policy as embodied in the new Warrants and last Army List. We desire to see the public Medical Services competed for by a numerous and good class of men; and whenever the authorities have assured us of their being actuated by a just and liberal spirit, we will do our best to aid them, but not before.

THE long-deferred motion of Mr. QUAIN for inquiry into the mode in which the recent requirements of the College of Surgeons in respect of Practical Physiology and Practical Surgery are carried out in the several schools, came on for discussion on the 17th inst., and was, we are glad to say, unanimously accepted. The resolution, after all, only suggests to the Court of Examiners to investigate the matter, and to report in the manner that shall seem most expedient to it; but it will nevertheless, we believe, have a good effect. It is perfectly well known already that at some medical schools the arrangements for teaching Practical Physiology are utterly ineffective; while we ourselves pointed out last September how very variable, and on the face of it unsatisfactory, were the arrangements for the course of Practical Surgery at the several London schools. And if this is so in London, where there are plenty of young teachers with little practice and plenty of leisure to give to this practical instruction of the student, what must be the case in the provinces, where the lecturers in many of the schools are men engaged in large general practice, liable to be called on when engaged in the work of teaching, and with little leisure to prepare themselves for it? We believe there is in the interest of the student much ground for the proposed inquiry.

We should not be sorry if the investigation were to be extended to the clinical teaching in the several schools, as suggested by Sir WM. FERGUSSON. Clinical lectures are too often set discourses delivered rather with a view to publication than with reference to cases under the students' observation. But we could forgive this were the lectures really given as announced in the prospectuses, which they too often are not. To give a clinical lecture requires study of the cases to be referred to beforehand, leisure to consult authorities, and some arrangement of the method in which the subject is to be treated. A physician or surgeon who keeps no case-books, or never reads those kept for him, can hardly be expected to deliver clinical lectures with much benefit to his hearers. But, after all, it is bedside clinical teaching which is the best for the student, and which is so rarely well done. There are, we are happy to know, both physicians and surgeons who can and do teach efficiently at the bedside, but they are not numerous; and if Mr. QUAIN'S motion should stimulate others to follow the example thus set them, he will, we believe, have conferred a lasting benefit on English medical education.

Medical Annotations.

"Ne quid nimis."

STUDENTS AND MEDICAL REFORM.

THE apathy of students in regard to the proceedings of the Medical Council is apparent from the very slight notice that is taken of them in their journals. Yet they are very deeply interested in the questions lately under discussion, and now raised again by another Medical Reform Bill, which, if carried, will establish a costly and complicated system of examination for licence to practise, which is likely to tell with peculiar hardship on students, especially English and Irish. The attempt to maintain all the existing bodies out of the fees for a mere licence to practise means a permanent tax on students in medicine, which should not be imposed without a protest from themselves. Medical education is expensive enough now to deter many from entering the profession, and it would be unjust and inexpedient to give State sanction to an examination system that will virtually make students maintain nineteen bodies. It is not practitioners, so much as students, that are interested in opposing Mr. Headlam's Bill, which is to be read on Monday night.

BIRTH AND DEATH REGISTRATION.

THE importance of a complete and accurate registration of the causes of all deaths has so long and so persistently been advocated by us, that we cannot but observe with satisfaction any indications of awakened public interest in the subject. There is nothing new to be said about it, nothing that has not been said over and over again in these columns for years past; but then it takes an immense deal of reiteration to attract sufficient attention from a Minister to defects in the administration of his department to induce him to legislate for their removal.

Our system of birth and death registration in England has long been admitted to be defective by the best authorities—namely, by those who are responsible for its working. It is almost incredible that when the Scotch and Irish Registration Acts were passed, rendering the registration of births compulsory in those two divisions of the kingdom, the earlier English Act was not amended so as to make the law in that respect uniform throughout the whole kingdom. On other points, also, no attempt was made to secure uniformity of practice, and the result has been to detract from the usefulness of the vital statistics of the three divisions for purposes of strict comparison. To our minds the method of separate legislation upon matters absolutely common to the whole kingdom is entirely wrong, and it is marvellous that this is so often lost sight of.

A Bill for the amendment of the English Registration Acts is now before the House of Lords, and in its present shape it must be supposed to represent the matured views of the Government, or rather of Mr. Stansfeld, who is responsible for its production. Now, if anybody will take the trouble to compare this Bill with the Irish and Scotch Registration Acts in force, he will soon discover that the difference, even as regards matters upon which no conceivable ground for difference exists, is considerable. Why should this be so? Why, for example, in reference to birth registration, is it necessary to specifically limit the provisions of the Bill to "every child born *alive*," whilst in the Scotch and Irish Acts the wording is simply "any child born"? Again, why should the time within which notice of a birth is to be given to the registrar be forty-two days in England and twenty-one days in Scotland and Ireland? We admit that the Bill is on the whole an improvement upon our existing registration system, but we are by no means satisfied that it ought to pass in its present shape. It appears to us that the whole question of birth and death registration throughout the United Kingdom ought to be taken in hand at once, and settled upon a basis that practically might be regarded as final. The best course, therefore, would be to refer this Bill to a Select Committee, with instructions to report as to the steps to be taken for making the law and practice of registration uniform in England, Scotland, and Ireland. A Committee of the House of Commons would be preferable in this instance to one of the Peers, because of the medical element in the Lower Chamber, the subject having important medical bearings.

POLLUTION OF RIVERS.

THE Earl of Shaftesbury has laid on the table of the House of Lords a Bill for amending the law relating to the pollution of rivers, the preamble whereof sets forth that such pollution "has of late years so increased as to become a national evil," which is an indisputable fact. To remedy this it is proposed to prohibit, under accumulative penalties, the casting of solid refuse matters, of sewage, or of any noxious liquid matters into rivers; a definition of liquids to be deemed polluting is given, power being taken for the Local Government Board to alter any of the conditions in the defining clause, subject to the veto of Parliament. The "pollution authority," by whom alone proceedings under this Act are to be instituted, is to be the "sanitary authority" constituted under the Public Health Act of 1872. Should the justices before whom proceedings in any case are taken be of opinion that the pollution was occasioned by excessive rainfall or discharge of storm-water, or was of a trivial nature, or if they are satisfied that the best practicable means of prevention or purification have been used by the parties against whom complaint is made, they may rule that the penalties under the Act are not applicable. Wherever river pollution from sewage or other offensive liquid exists at the time the Act comes into operation (January, 1874) the pollution authority is required to give notice to the offenders to discontinue such pollution within a given time, under heavy penalties; but an extension of time may be given either by mutual understanding between the parties or by award of the Local Government Board. It will be remembered that in Mr. Stansfeld's first Public Health Bill of 1872 the subject of river pollution was dealt with, but was "thrown overboard."

TREATING PATIENTS.

WE have often maintained the desirableness of accustoming medical students to think of treating patients rather than of treating diseases. At Liverpool this doctrine appears to be carried rather a long way, for we read in the report of a lawsuit tried there that the house-surgeon to the Infirmary admitted that a patient with little or nothing the matter might still be permitted to attend, and that the students might bandage and poultice him—partly for the sake of the practice, and partly to "humour" the applicant. The inference was that a fortnight's attendance at the Infirmary gave only a slender foundation for the belief that the person attending had been seriously hurt; and the house-surgeon is reported to have said that if he and his colleagues did not "humour" the patients things would be made very unpleasant for themselves. Cannot the Committee or Association for the Reform of the Out-patient Departments of Hospitals turn their attention to Liverpool? They might perhaps be of some use in preventing the waste of poultices, and in London the cessation of their activity could, we think, be endured.

THE FINANCES OF THE COUNCIL.

MR. LOWE once displayed some interest in the working of the Medical Council. Now that a general apathy has overtaken him concerning everything but the Budget, it does not seem that we can expect much from him in further criticism of this body. One of his old charges was, that the Council was costly in its working. The income of the Council last year was £8774 18s. 8d. Its expenditure, indeed, including the expenditure of the Branches, was only £3596 13s., leaving a balance of £5178 5s. 8d. in favour of the Council. Though the money is not all spent, it is not the less effectually taken from the profession. Thus £5033 5s. of the income was from fees for registration, as follows:—974 fees of £5 each, £4870; 32 fees at £2 each, £64; 397 fees at 5s. each, £99 5s. The other principal items of income were, balances in hand from Branch Council in England £2392; from Branch Council, Scotland, £458 8s. 11d. The dividends on Stock amounted to £800 19s. The largest share of the money spent goes to the members of the General Medical Council for attendance and travelling, and to the members of the Executive Committee. £937 13s. was the sum paid to members of the General Medical Council, and £143 17s. to members of the Executive Committee. Of the Branch Councils the expenditure was respectively—English, £562 6s. 2d.; Scotch, £308 9s. 11d.; Irish, £419 5s. These sums chiefly represent salaries of officials and printing; the fees to members for attendance being in England only £18 18s., and in Ireland £12 12s. In Scotland they rose to £78 15s. The excess of £5178 5s. 8d. of income over expenditure excites very serious thoughts as to the justifiableness of such a tax on the profession. The Council sat long enough for the transaction of any real sound business, and the registrations, though in excess of previous years, are probably not more than they will be on an average in future. The question presses, Why should a body like the Council receive such a large sum to invest in Consols?

THE POOR-LAW MEDICAL OFFICERS, AND THE PUBLIC HEALTH ACT.

THE recent meeting of the Poor-law Medical Officers' Association, at the Medical Club, gave satisfactory indication that the question which so nearly concerns the members in the operation of the Public Health Act was about to be properly dealt with by them. With the aid of Dr. Lush, M.P., Mr. Brady, M.P., Mr. Corrance, M.P., and Mr. E. Wells, M.P., their case, and the case of the public as involved therein, ought to be effectually brought before the House of Commons. It is a pity that the different speakers at the meeting should have weakened the Poor-law medical officers' case by launching into considerations of the general policy of the Public Health Act in respect of what was termed "the intermediate authority." Criticism upon Mr. Stansfeld's individual acts in the initiation of the measure was one thing; criticism upon a policy recently affirmed by the Legislature was another. It should have been obvious to the different speakers that their particular case was against Mr. Stansfeld's interpretation of the Act, and that to confuse that case with questions relating to the general policy of the statute, was simply to weaken it. It should have been more clearly seen and expressed, moreover, that Mr. Stansfeld's plea that the differing circumstances of various localities demanded different arrangements, had no real foundation. The different arrangements made by the general inspectors of the Local Government Board, and approved by the Board, betray, not differences in circumstances of localities, but differences in essential principles of action, which could only have occurred in the hands of amateurs coming to a new and previously unconsidered task. Mr. Stansfeld's plea is neither more nor less than a cloak for the shortcomings of his general inspectors. No health organisation can be completed without the aid of the Poor-law medical officer, and this is as well known inside as outside Gwydyr House, and has been known from the beginning. See, for example, the Royal Sanitary Commission's report, and the annexed evidence. The resolution adopted by the meeting was needlessly tame—namely:

"That this meeting, holding that Poor-law medical officers are specially in a position to give that exact, practical, and positive information respecting the condition of the humbler classes among whom diseases of a preventable character mainly originate, and from whom they spread to the classes above them, expresses its regret that the administrative arrangements made by the Local Government Board to carry out the provisions of the Public Health Act, 1872, do not appear to utilise and include the local knowledge and services of local officers."

LOCAL ADMINISTRATIVE AREAS.

THE President of the Local Government Board has given notice that on Thursday, the 1st of May, he will move the appointment of a select committee to inquire and report whether the existing boundaries of parishes and unions and counties might be so altered and adjusted as to obviate the inconvenience which now arises from parishes and unions extending beyond the limits of the counties in which they are for the most part situate. The importance of this matter of local administrative areas is far beyond what is apparent on the surface, as will be gathered from the following remarks of the Royal Sanitary Commissioners:—"Unions, and sometimes even parishes, overlapping county boundaries; registration districts making incomplete correspondence with them in statistics of births and deaths; highway districts made optionally and irrespectively of all other areas, or coinciding sometimes with one sometimes with another; petty sessional divisions generally differing from all—cause altogether, to a country whose life is self-administration, probably the maximum of embarrassment and waste of local government, and the utmost loss of means and effectiveness." The commissioners had any quantity of evidence before them of the necessity for putting an end to the confusion of existing areas, and it is clear to us that to do this effectually there must be an inquiry of a special and exhaustive character made. We have the misfortune to be again convinced that Mr. Stansfeld, in this as in other respects, has not hit upon the right method of procedure to accomplish satisfactorily the end in view. A Royal commission composed of a few persons well informed upon the matter in hand, and conversant with all the details and points involved—and probably it would be difficult to find three such persons in the House of Commons—would constitute a body from whose deliberations something practical and complete might be expected to result. But from a select committee we can hardly anticipate other than a compromise more or less unsatisfactory all round.

THE MEDICAL INTERNATIONAL CONGRESS OF VIENNA.

THIS congress is called the third; the first having taken place in Paris in 1867, and the second in Florence in 1869. As was the case in Paris, the coming congress is to coincide with the Universal Exhibition of the Austrian capital.

Such of our countrymen as attended the meetings of Paris and Florence know full well what meaning should be attached to the word *international*. A sprinkling of foreigners may attend, some will send papers, and some may even attempt to join in the discussion; but the actual work is done by the natives, and the international influence is

merely complimentary. Language will always be the stumbling-block of these meetings, and the attempt to render them really international has failed, and will always fail. Much more wisely acted the British Medical Association, especially at Oxford and Birmingham. Foreigners were made most welcome, and anything they had to say which was worth listening to and presented in the vernacular, was received in the most friendly spirit.

The Vienna committee, composed of Rokitansky, Sigmund, Hebra, and others, are endeavouring to remove some of the difficulties. They have settled that the German language shall be used during the continuance of the congress; but other languages will be permitted in the discussion. All announcements from the chair will also be translated into French, English, and Italian. The minutes will likewise be drawn up in these languages, as well as in German. The meetings are to be held from the 2nd to the 10th of Sept., and all medical men who send in their names become members, foreigners not paying any entrance fee.

Some questions have been proposed for discussion by the committee; but any question sent in before the 1st of May, and approved by the president (Rokitansky), will be brought forward for discussion.

The subjects proposed by the committee are—(1) vaccination; (2) quarantine and cholera; (3) prostitution; (4) the health of towns; (5) an international Pharmacopœia; (6) medical tuition and examinations in all countries.

The members are to meet daily, Sundays excepted, from nine to one. No speech to last more than fifteen minutes, except the meeting express a wish to grant an extension of time, &c.

In perusing the reports which have been published of the Paris and Florence International Congress, one meets with a fair amount of original and useful matter. The Vienna meeting and reports will probably not be inferior; but, as we said above, the German element will be paramount. Nor can it be otherwise, though several subjects, nay almost all those proposed by the committee, have a direct international bearing.

AIR IN PUBLIC SCHOOLS.

A NEW journal, entitled the *Sanitarian*, and conducted by Dr. A. N. Bell, has just been started in America, having in view the practical questions of State medicine: the health of armies and navies, marine hygiene, quarantine, civic cleanliness, water-supply, drainage and sewerage; sanitary architecture; light, space, warming, and ventilation; climate and domiciles; epidemic, endemic, and hereditary diseases; occupation, exercise, and habits; food and beverages in all varieties and quantity—a sufficiently extensive programme if well worked up. The present number starts with a paper on the importance of sanitary science by Dr. Agnew, and, amongst others, with a good paper by the editor on the New York Quarantine Establishment, with a chart of the harbour and sketches of the hospital on the Westbank, and of Hoffmann Island. Another paper is by Dr. Janes, who states he has examined the air of the public schools in New York, and in seventeen samples he determined the presence of carbonic acid varying in amount from 9·7 to 35·7 parts in 10,000, or, in other words, from more than twice to nearly nine times the normal quantity. The ventilation was generally faulty, and could only be obtained by opening the windows, a practice detrimental to the health of children who sit near or directly under them. The following experiments, made in the Roosevelt-street School, shows the inefficiency of ventilating flues in the wall unprovided with means for creating an upward current. An examination of the air in one of the class-rooms provided with a ventilating flue was made while one of the windows was opened, and yielded 17·2 parts of carbonic acid in 10,000. The window was then closed, and after the lapse of ten minutes another examination gave 32·2 parts of carbonic acid, or an increase of 15·6 parts. The experiment at this time became so oppressive that it was not continued.

MR. CHARLES HAWKINS.

WE regret to learn that Mr. Charles Hawkins has thought it right to resign the seat in the Council of the College of Surgeons which he has held since 1866. We regret this step because Mr. Hawkins has always shown himself to be a supporter of liberal and advanced views, and can be ill spared from the Council, where, however, the alteration of tone during the last few years has been marked. Having a thorough knowledge of business proceedings, Mr. Hawkins has been especially useful in repressing the tendency of the executive of the College to absorb into its own hands the power of the Council—a result much favoured by the annual change of President,—and has been very zealous in serving on committees. Mr. Hawkins's resignation will, of course, affect the election to the Council next July, as his term for re-election would not have come round till next year. The retiring members would have been Mr. Quain, elected in 1854; Mr. Turner and Sir J. Paget, elected in 1865. By the inscrutable bye-laws of the College, Mr. Hawkins's resignation will save the *senior*, Mr. Quain, and Sir James Paget will have to stand a re-election, Mr. Turner not intending, we believe, to come forward again. Under these circumstances there will be two absolute vacancies, for which, no doubt, eligible candidates will be found.

A FIRST OFFENCE.

UNDER the title "A Hard Case," a Clapham newspaper records the result of an action brought in the Wandsworth County Court by a charwoman, intent upon recovering damages from the proprietor of a dog that had bitten her son's leg. The action brought out a point of law of some practical importance, which it might often be useful for surgeons to be acquainted with. It seems that the injured person in such a case has no claim, in default of proof that the dog has bitten someone else before. In other words, an owner is not bound to take special care of his dog until after it has given evidence, by biting, that it cannot safely be allowed to go at large. "Every dog," says the proverb, "has his day"; and it also seems that the law allows every dog his bite! The plaintiff was accordingly nonsuited.

"THE COPPICE" NEAR NOTTINGHAM.

THE seventeenth annual report of the Lunatic Hospital for the town and county of Nottingham has been issued. As most of our readers are aware, this institution is supported by voluntary contributions. Patients are received and treated in it who, while above the pauper class, are yet unable to pay the whole expense of their maintenance, the scale of fees ranging from 40s. to 7s. a week. The report shows that there are now sixty-four patients (thirty-three males and thirty-one females, which is close on the maximum limit) under treatment, and the governors will probably in a short time be under the necessity of enlarging the premises. The general health of the patients and the sanitary state of the hospital during the year were excellent, while it was found unnecessary in any case to subject a patient to restraint or seclusion. With regard to the medical treatment of the patients, Dr. Tate, the medical superintendent, remarks that hydrate of chloral is constantly used by him in moderately large doses as a hypnotic, and in no single case has he observed any ill-effects from it. On the vexed question of forcible feeding, Dr. Tate gives his

testimony in favour of the stomach-pump procedure, which he considers has many advantages over the method of administering nourishment through the nasal passage. The managing committee of the hospital and the commissioners in lunacy unite in acknowledging the efficient and vigilant supervision maintained over the establishment by Dr. Tate.

A USEFUL ARTICLE OF FURNITURE!

IN the discussion on the vote for Furniture of Public Buildings on Monday night, Mr. Alderman Lusk remarked of the item "Inspector of Anatomy, 7*s.* 6*d.*," that "the thing was very cheap if it was good," under the impression we imagine, that the seven-and-sixpenny Inspector of Anatomy was a useful article of furniture, allied perhaps to a turnspit! If the worthy alderman had been referring to Mr. Stansfeld's, rather than Mr. Bruce's department, we should not have been surprised at the low figure at which he appraised an Inspector; but as it is, we must point out that the item shows the strict economy in office details of the Inspector of Anatomy, who is himself a salaried officer.

DR. LUSH has given notice that he will move for a return showing (1) as regards separate appointments of medical officers of health of urban and rural sanitary districts, the names and qualifications of the persons appointed, and what other appointments are held by them; the names, areas, and population of the districts, and the salaries of the officers, and whether or not they are debarred from private practice; (2) the same particulars with regard to amalgamated appointments; (3) the names of the sanitary authorities which have declined to accept part payment of the salaries of medical officers of health from the Consolidated Fund.

THE handsome monument erected in Westgate Old Cemetery, Newcastle-on-Tyne, to the memory of the late Dr. I'Anson was inaugurated a few days ago, in the presence of a very large assembly, by Mr. Headlam, M.P. The memorial is of decorated Gothic design, and is surmounted with a St. Andrew's cross. The front panel has the following inscription:—"In memory of William Andrew I'Anson, surgeon of this town, who died April 4, 1872, aged 56 years. Erected by a number of his friends." The panel beneath the inscription contains a marble *alto relievo* subject representing the raising of Jairus's daughter, with the words "I was sick, and ye visited me."

THE Tribunal of Correctional Police at Lille has just tried a dentist for the illegal practice of medicine and for homicide by imprudence. The defendant, at the request of a lady, who was about to have two teeth extracted, administered chloroform to her. She had inhaled it on a previous occasion without inconvenience, but this time it produced fatal effects, the lady dying under the operation. The dentist has in consequence been prosecuted, and the court, now holding that as he had no diploma he was not qualified to employ anæsthetics, condemned him to two fines of 15 francs each on the first count, and to one of 500 francs and a month's imprisonment on the second.

IN Madrid, on the 16th inst., was laid the foundation-stone of what is destined to be a splendid museum of comparative anatomy, natural history, and ethnography. The museum will be erected and completed at the sole expense of our distinguished *confrère*, Dr. Don Pedro Gonzalez de Velasco, with the noble and praiseworthy ambition of advancing at one and the same time the cause of science and the progress of his country.

AMONG the recent additions to the Hunterian Museum are two Peruvian mummies, presented by Mr. Reginald T. G. Leigh; the skull of an Egyptian mummy, from the tombs near the Pyramid of Sakhara, presented by Mr. E. A. Goodall; two skulls of South Sea Islanders, from Sir William Fergusson; and a curious old instrument for extracting teeth, presented by Mr. T. O. Hunt. His Royal Highness the Prince of Wales has also presented, through Sir James Paget, an interesting specimen of fracture of the leg-bone, which occurred to one of His Royal Highness's favourite hunters.

THE cultivation of the vine in Australia is looked upon with considerable interest in this country, and we had occasion some few months back to report favourably on several specimens that had been submitted to us for analysis. It is therefore with some disappointment that we learn from the *Australian Medical Journal* that among six samples lately sent in to the Committee of the Melbourne Hospital, and examined by them, none were considered suitable for hospital use.

THE case of Daniel Reddin, the Fenian convict, who has sued the authorities of Chatham and Millbank for malpraxis, comes before the Court of Queen's Bench next week. Mr. Isaac Butt, Q.C., and Mr. Douglas Straight are retained as his counsel. The trial will involve professional evidence as to the signs of "incomplete paraplegia" (Brown-Séquard), and medical witnesses on both sides have been required to appear.

UNDER the name of Leo Ross, Dr. D. A. Moxey has been giving a series of dramatic recitals at Brighton in aid of the Hospital for Women in that town. We are glad to observe that the local papers are loud in their praises of the elocutionary and dramatic capabilities of Dr. Moxey; but may we venture to hint that a more happy histrionic appellation might be assumed than one so suggestive of Leo Hunter of the ilk Pickwick?

THE mortality in London and twenty other large towns last week averaged 27 per 1000 per annum. The deaths in the metropolis amounted to 1603, including 2 from small-pox, 25 from measles, 5 from scarlatina, 4 from diphtheria, 75 from whooping-cough, 29 from different forms of fever, and 15 from diarrhœa, while the deaths from pulmonary affections amounted to 592.

AN influential meeting was held last week in Southampton, under the presidency of the Mayor, for the purpose of furthering a movement for presenting Dr. Bond with a testimonial on the occasion of his leaving the town. Dr. Bond was for eleven years principal of the Hartley Institution, and in a large degree developed its educational scope and usefulness.

DR. FITZGERALD, late medical superintendent of the Limerick District Lunatic Asylum, having sent in his resignation, has been allowed by the governors of that institution a retiring pension of £210 per annum. Dr. Fitzgerald has been attached to the asylum for upwards of twenty-two years.

THE municipality of Berlin, alarmed at the 139 cholera cases at St. Petersburg since March, is preparing for the repulse of the disease. Meanwhile typhus fever abounds in the North German capital. Drainage operations, so loudly demanded by the Berliners, are about to commence, and a loan of £3,500,000 has been raised to carry them out.

A FACULTY OF MEDICINE is about to be created at Geneva. Dr. Duchosnal, member of the Conseil Législatif, has taken the question in hand, and recently made the proposal to the Grand Conseil to establish a Faculty of Medicine, a proposal which was well received and passed, supported as it was by a large number of physicians.

SCANT consideration appears to be shown by the French Government to Communists *en route* for Caledonia. The transport ship *Orne*, laden with prisoners, lately put in to Melbourne short of provisions and with 419 cases of scurvy on board.

WE regret to announce the death of Dr. Skae, the able and accomplished medical superintendent of the Royal Lunatic Asylum at Edinburgh. Dr. Skae died at his post on Friday, from an obscure affection of the throat. We shall give an account of his life and labours next week.

THE "Digest of Statutes relating to Urban Sanitary Authorities," promised by Mr. Stansfeld in the course of last session, has at length been printed and presented to Parliament. It forms a volume of 256 pages.

WE understand that preliminary steps have already been taken at Munich for erecting a monument to the late Baron Liebig.

IT is stated that Dr. Kirk's appointment as Political Agent at Zanzibar has been confirmed.

INSTRUMENTS AT THE INTERNATIONAL EXHIBITION.

Concluded from page 578.)

OUR former article on the instruments at the International Exhibition was broken off in the course of an account of the objects shown by Mr. Hawksley. Proceeding with his case, we find Mr. Manby's flexible probes. These are made of a close spiral coil of steel wire strongly gilded, and formed into a solid knob at one extremity. They will turn any corner, or find their way to the bottom of the most intricate sinus; and the same principle is being applied to the construction of catheters. Among other noticeable matters we may also mention a very compact and portable set of post-mortem instruments in folding leather case; a pair of short midwifery forceps, designed by Dr. Gream, and differing from most other patterns in the narrowness of their blades; a subcutaneous syringe designed by Dr. Gowers, in which a stop prevents the piston from being drawn up beyond the point to which it is set, and which may therefore be left with a patient or nurse, for use in case of need, without danger of overdose; a metal dissecting-case, made of japanned tin like an artist's colour-box, very portable, durable, and clean, and much smaller than the ordinary wooden cases; Mr. Ewens' tonsil guillotine, with its bars to prevent closure of the mouth; a very convenient set of tracheotomy instruments, with Mr. Durham's adjustable tubes; Dr. Barnes's vaccination-case; Dr. Tilbury Fox's apparatus for local or general fumigation by calomel; and Dr. Bristowe's gynæcological stethoscope, for application to the body in any position. Mr. Hawksley further shows an assortment of various thermometers, with specimens illustrating successive stages of manufacture; several ophthalmoscopes, including Mr. Oldham's, and the hand and demonstrating ophthalmoscopes of Mr. Brudenell Carter, the last-named with the latest improvements; Mr. Brudenell Carter's perimeter; Dr. Handfield Jones's sphygmometer, for measuring in grammes the pressure required to stop the radial pulse; and a number of instruments used in physiological laboratories for various purposes of research. The latter, as well as a collection of forceps, minor operation and pocket-cases, and similar matters, are exhibited for excellence of quality and workmanship. Mr. Hawksley shows also a truss in which the pad for the support of the hernia is made of ebonite or some similar substance, and presents a series of linear depressions radiating from the centre. The inventor claims that this pad is not liable to slip, and that the pressure which it exerts has a tendency to close the ring.

Messrs. Matthews Brothers show Mr. Wood's trusses for inguinal and femoral hernia, which are so arranged as to exert marginal pressure; and a pad of their own, for umbilical hernia, for which they claim that it "reflects" the action of the abdominal muscles for the support of the protrusion. They have also Mr. Wood's gag, for operations on the mouth and throat; and his spring tractor for varicocele. They have an excellent bichromate of potash battery for galvanic cautery; a portable mercurial fumigator; a guarded perforator for craniotomy; Dr. Priestley's craniotomy forceps; a tube for applying pressure, by means of an india-rubber bag distended by iced water, to check hæmorrhage after lithotomy; Dr. Playfair's intra-uterine probes; Mr. Henry Smith's instruments for hæmorrhoids; Sir Wm. Fergusson's instruments for cleft palate and for lithotrity; and Mr. Bryant's torsion forceps. They show also a folding M'Intyre splint, a lithotrite, and a spring tracheotomy tube, contrived or improved by the firm.

Mr. Miller exhibits an instrument for the treatment of fracture of the patella, an "improved truss," and contrivances for the cure of bunions and of knock-knees.

Among professional exhibitors, perhaps the first place should be given to Mr. Jeaffreson, of Newcastle-on-Tyne, who sends his highly ingenious "photo-perimeter" for measuring the field of vision by a travelling spot of light. This contrivance may also be used to determine the degree of astigmatism, the angular measurement of diplopia, and the sensitiveness of different parts of the retina either to white light or to any of the colours of the prismatic spectrum. It is fully described in a printed paper appended to it, and must be seen to be entirely appreciated. As a perimeter, it is open to the objection that the direction of the eye of the patient is not easily watched by the observer.

Mr. Greenway of Plymouth, whose great ingenuity is well known, sends sets of splints and suspenders, an irrigating apparatus, his ophthalmoscope, and his instrument for cutting out circular pieces from the iris. Mr. Charles Hunter sends his pocket apparatus for hypodermic injection; and Dr. Asher contributes the instruments used in the rite of circumcision.

The department of ophthalmic surgery may be said to be poorly represented; as the manufacture of instruments to be used in operations upon the eye, as contra-distinguished from instruments purchased to be looked at, is almost a monopoly in the hands of Messrs. Weiss, who do not exhibit. Messrs. Krohne and Sesemann show eye instruments of good patterns, and among them a double fixation hook which has lately reappeared in London. They have also an improved pair of Dr. Noyes's scissors, in which greater smoothness and steadiness of action is gained by making one of the spring handles terminate in a narrow tongue, which is received into a corresponding slit in the other. Messrs. Evans and Wormull, and Blaise and Co., show articles that are described as eye instruments, but that are nearly all of obsolete patterns, and with blades too large for use. Dr. Noyes of New York sends a small but very important collection of spectacles, by H. W. Hunter of that city, which show new and improved methods of combining high spherical powers with cylinders, and which should be carefully examined by all who are interested in such matters. Mr. Jabez Hogg sends his "demonstrating ophthalmoscope," which is that of Mr. Brudenell Carter, with a difference which destroys its peculiar advantages; and he sends also a collection of appliances for eye operations, employed by the native surgeons of India. One of these, an "instrument" for removing foreign bodies from the cornea, is highly interesting; because, although rather widely known in this country, it is here applied to a totally different purpose, being used almost exclusively to secure iron shoes upon the hoofs of the horse and of his more humble congener.

In aural surgery, Dr. Allen exhibits a complete collection of instruments, and Messrs. Krohne and Sesemann show Mr. Pennefather's perforator for the tympanum, and his instrument for alternately raising and depressing the membrana tympani by atmospheric pressure.

The department of dental surgery lies almost beyond our province, but the Odontological Society has contributed a very curious collection of old instruments, and the cases of Messrs. Ash and other makers afford ample testimony to the skill and ingenuity that are being brought to bear upon this branch of practice. We must not omit to mention an American contribution, Morrison's "dental engine," that promises, we think, to be of wide application in general surgery, for trephining, cutting out diseased bone, drilling holes in bone, and for all other purposes for which a rotatory movement of great power and speed would be desirable. The instrument consists of a slender driving-rod, worked quite noiselessly by means of a treadle, wheels, and endless band, and so supported upon a counterpoised and jointed stand that the extremity which carries the tool follows the hand of the operator in any direction without appreciable weight or resistance. Near this extremity the driving-rod is interrupted by a few inches of strong, closely-coiled spiral spring, covered externally by a larger coil of the same kind, terminating in a metallic tube that acts as a handle. To the tube and outer coil no movement is communicated, and the two coils render the driving-rod quite flexible, without in the least degree interfering with its rotation. The revolving tool can thus be applied to any portion or aspect of a tooth, and worked in any direction that may be desired, and the "engine" not only greatly abbreviates the cutting-out work of the dentist, but also saves much pain to sensitive patients. Mr. Sercombe has had it in daily use for a year, and speaks in the highest terms of its simplicity and utility.

Mr. Grossmith, Mr. Gillingham, and others show a variety of artificial limbs, and of couches and other instruments for the treatment of various kinds of weakness or deformity.

We cannot take leave of the exhibition without expressing our regret at the manner in which the names of professional men have been placarded in the cases of instrument makers. Members of the profession are generally fully aware of the claims of other practitioners as inventors; and would at once recognise the contrivance or the improvement of Mr. A or Dr. B. The names of these gentlemen, attached to various instruments, seem as if they were intended for the edification of the public, who will doubtless be induced, by their love for the unknown, to visit the West Theatre in some numbers. We have been informed that some surgeons have prevented the appearance of their names in the manner referred to; and we would suggest that the names now displayed might be removed with advantage. Even the appearance of proclaiming one's ingenuity to the public is far better avoided than incurred.

Correspondence.

"Audi alteram partem."

THE ROYAL VICTORIA DISPENSARY, NORTHAMPTON.

To the Editor of THE LANCET.

SIR,—I have read with much interest the able, impartial, and exhaustive report of your Commissioner on the working of this institution, and your editorial remarks thereon.

Nothing would have pleased me better than to have had the opportunity of discussing the matter fully in your columns, were I not afraid of trespassing unduly on your space. I trust I may be permitted to say, without intention of giving offence, that in your editorial remarks you have done the Committee considerable injustice. I think those who consider the report attentively will not fail to see that your conclusions are scarcely warranted by the statements of your Commissioner.

To most of the objections urged against our system I have replied by anticipation in the pamphlet published by me and alluded to by your Commissioner. To that pamphlet I must refer those who desire further information on the subject.

On one point objected to in the report—the smallness of the midwifery fee—I quite admit the force of the objection. In 1858 I pointed out that our midwifery arrangements were defective, and have always since that recommended those who were forming similar institutions not to follow them. Our rules were framed in 1844; at that time 10s. 6d. was, I believe, the usual fee for attending the poor—at any rate, no one then objected to its being too small. We have always felt it would be difficult to alter our rules, so as to deprive the free members who joined on the faith of those arrangements of any of the advantages to which they are entitled.

As to the smallness of our medical staff. We commenced with six; we found it was impossible to work with that number; we reduced the number to three; from this time the institution has worked well. Our medical officers are content, and free members satisfied—nay, grateful. We are asked to alter our number, not because such alteration is required for the benefit of our members, or by our own officers, but for the benefit of outsiders, who would now seek to derive advantage from results proceeding from the labour, skill, and care of our present staff. Our Committee may be excused if we are somewhat slow in altering rules, under which we have obtained so great a success, in order to establish a system in which we have no faith. When you call upon us to do this for the benefit of the profession, I think you should show us first some institution in which the plan for which you contend has been tried, and met with a success greater than that which has attended our efforts. My experience, which is considerable, would lead me to anticipate a different result. At the same time I would remark that we should probably have made some addition to our staff this year if it had not been for the facts mentioned in our report.

You desire that we should prohibit our medical officers availing themselves of the service of assistants. In other words, you would render it impossible for gentlemen of eminence and good practice to hold these appointments. Why is our success so great? Simply because we retain the services of men of high standing, in whom the free members have confidence. You imply that the work is mainly done by assistants; in this you are inaccurate. Every patient has the absolute right to see the medical officer personally. Each of our staff daily sees a great portion of his patients.

Do you suppose that the working classes, with that keen regard for their own interests which they always display would be content to pay £2000 a year, and be deprived of the services of the men by whom they have been attended for years? It must be borne in mind that we insist that every assistant engaged in seeing our members should possess the legal qualification.

With respect to the class of persons we admit as free members, I think that your Commissioner's report ought to satisfy everyone who looks at the question even in a professional point of view that the action of our Committee in this respect cannot be impugned.

I desire to add that we have recently made a rule excluding all persons renting houses rating at £15 yearly. See what is said by your Commissioner, as to the course pursued by our Committee in the selection of members, and then say whether there is a public institution in England where medicine is given gratuitously, where anything like the same trouble is taken to exclude improper persons.

The fact of a Provident Institute being started in the town to admit those who, from their position, are excluded by our rules, ought to satisfy the profession that any attempt to develop the provident principle accompanied with a desire to exclude the more provident of the working classes must end in failure.

There is much more I would desire to say, but I must not trespass unduly on your indulgence.

I am, Sir, your very obedient servant,

JOHN BECKE, Hon. Sec.

*** We much regret that the long reports of the meetings of the General Medical Council and of the discussions at the Pathological Society have prevented the earlier publication of Mr. Becke's letter.—ED. L.

MEDICAL OFFICERS ON THE BATTLE-FIELD.

To the Editor of THE LANCET.

SIR,—*Apropos* to the argument upon which the abolition of regimental medical officers in the British army is based—namely, that the regimental system is unsuited for war,—will you kindly permit me to draw your attention, and that of your readers, to what is now recommended to be done in this respect in the French army, and what was done during the late war in the Prussian army.

I am, Sir, very truly yours,
C. A. GORDON, Deputy Surgeon-General.

Dover, April 15th, 1873.

M. Le Fort, profiting by the experience of the late and previous wars, draws out a plan for the working of the medical service under similar conditions. "On the march the proper place for the ambulance establishments to be is with the general head-quarters of the *corps d'armée*. If a division or brigade be detached, a division field hospital establishment according to its strength should accompany it. When a battle is expected the ambulances take up their position at a distance of 1500 or 2000 metres in rear, and as much as possible on the roads by which wounded may be expected to return, advantage being taken of villages, farms, and buildings of various kinds, taking care to have access to water, to be out of the line of possible retreat as much as possible, and to be sheltered from the enemy's fire, as far as that can be insured. The *brancardiers* then take from the ambulance-waggons the *brancards* and portable dressing arrangements, water-bottles, &c., and, in parties of threes to each *brancard*, take their places in rear of the companies to which they are attached. The regimental surgeon takes charge of them, and directs their movements; two regimental assistant-surgeons take up a position at 1000 or 1500 metres from the line-of-battle, and then, under the surgeons-major of regiments of cavalry, establish a *place de secours*. The other regimental medical officers repair to the divisional ambulance or place of dressing established by the divisional *compagnie d'ambulance*. The third divisional company of the ambulance remains in reserve, to be utilised according to requirements." ("La Chirurgie Militaire," p. 289.)

With regard to the Prussian system, the same author, at p. 111, gives the following particulars:—"When a battle takes place, one half of the regimental medical officers remain with their corps, the others repair to the *place de pansement*. The medical officers remain with the troops under fire, to give assistance to the wounded and to direct the *brancardiers*. If the *place de pansement* be at a distance, the medical officers of the same brigade join together near the centre of the brigade, and there form a *place de secours*. If, on the other hand, this be impracticable, all the regimental medical officers not called to the *place de pansement* remain with their regiments."

Obituary.

JUSTUS VON LIEBIG.

FULLER of honours than of years the greatest of contemporary chemists has just passed away. Failing health had latterly been the portion of Baron Liebig. A fracture of the leg which had never been properly set disabled him from walking exercise, and the intensity of his work, carried on as it was in the atmosphere of the laboratory, was thus without its natural corrective. The powers of life gradually gave way, and on the 18th inst. he expired at Munich, in his seventieth year.

Justus Liebig was born at Darmstadt on the 8th, or, according to the more trustworthy account of Poggendorff, on the 13th of May, 1803. The gymnasium of his native town was his first school, and while there he showed, in addition to his liking for classical study, a very pronounced aptitude for physical, and especially chemical science. His father, who was a druggist and grocer, encouraged the bent of his son by placing him under an apothecary at Heppenheim, where he remained ten months, after which he went, in 1819, to the University of Bonn, whence he was transferred to that of Erlangen. At both seats of learning he distinguished himself greatly. At the latter, while not yet of age, he graduated, in 1822, as Doctor of Philosophy; and in the following year he was enabled by the bounty of the Grand Duke of Hesse to proceed to Paris, where he continued his studies in chemistry under the best auspices. Vauquelin, Gay-Lussac, Dumas, and Pelouze interested themselves actively in his career, and gave him the benefit of their advice and co-operation. It was at this time that his attention was turned to those dangerous salts known as fulminates, which, although discovered by our own Howard in 1800, had never been adequately described. Liebig made an accurate study of their constitution, and communicated its results to the Institute of France in 1824. Among others, Alexander von Humboldt was struck with the novelty and ingenuity of the memoir, and made its young author an inmate of his house, where he enjoyed the intercourse of some of the leading *savants* of the day. Humboldt's friendliness to his compatriot did not stop there. He so exerted himself in his behalf as to get him appointed, on the 26th of May, 1824, Extraordinary, and on the 7th of December in the following year, Ordinary Professor of Chemistry in the University of Giessen. For a quarter of a century Liebig made his chair a centre of attraction for aspiring chemists from every part of the world, and not a few of the most distinguished votaries of the science, both in Germany and elsewhere, owe their special proficiency to the genius of the young professor. Such names as Hofmann, Will, and Fresenius, were among the pupils who aided him in bringing his laboratory up to the point of perfection which made it the model for all other laboratories throughout Europe.

In 1837 he graduated as Doctor of Medicine at the University of Göttingen, and in the same year attended at Liverpool the meeting of the British Association for the Advancement of Science. There he read a valuable paper on the composition and chemical relations of uric acid, and so won the admiration of the chemical section of the Association that its members requested him to draw up two reports, one on "Isomeric Bodies," the other on "Organic Chemistry." Neither of these reports, oddly enough, appeared in the British Association's Proceedings; but, before the meeting which was held at Glasgow in 1840, Liebig published at Brunswick his "Organic Chemistry in its application to Agriculture and Physiology," which was translated from the original manuscript into English, and dedicated to the British Association. "This work," according to Sir David Brewster, "was only a part of the report on organic chemistry which that body had requested at his hands; but an abstract of the whole report was read on his behalf by Dr. Lyon Playfair before the chemical section at Manchester in 1842, under the title of "Organic Chemistry applied to Physiology and Pathology." In its first part this treatise discusses the various processes of nutrition and reproduction in the animal economy. In the second it describes the production of bile, urea, uric acid, and its components as well as the substance of the brain and nerves. In the third it treats of the laws of motion, and concludes with two chapters, one on the theory of disease and the other on that of respiration. The report was published in its integrity in 1842, under the title of "Animal Chemistry, or Chemistry in its Application to Physiology and Pathology." Dr. William Gregory, of Edinburgh (one of his pupils), translated it into English, while a French translation appeared in Paris from the pen of Charles Gerhardt.

In 1845 Liebig was raised to the rank of Baron by the Grand Duke of Hesse; and in 1850 he was offered, but declined, Gmelin's Chemical Chair at Heidelberg. One year after he accepted at Munich the Professorship of Chemistry, to which was added the office of Conservator of the Laboratory. By this time, honours academic and civic poured in upon him from every side. He was elected a corresponding Fellow of the Royal Society of London; and received similar recognition from nearly every learned association in America and Europe. In 1854 a subscription, amounting to £1000, was raised for him throughout Europe, to attest the value of his contributions to chemistry and agriculture, part of which was devoted, according to Sir David Brewster, to the purchase of five pieces of plate, one for each of his children, the remainder being handed to the

Professor in a cheque. In May, 1861, he was elected, in the room of the late M. Tiedemann, as one of the eight foreign Associates of the Academy of Sciences in the French Institute. In 1853 he was named by King Maximilian II. President of the Maximilian Order for Science and Art; and, in 1866, upon the retirement of Thiersch, President of the Munich Academy of Sciences and Conservator-General of the Scientific Collections of the State.

Liebig's chief title to the gratitude of civilisation is his contributions to organic chemistry, of which he may be regarded as one of the creators. He perfected the method of organic analysis; examined the fulminates and nearly all the most important organic acids, uric acid and cyanide of sulphur, as well as the products of their decomposition; the products of the oxidation of alcohol; and, in conjunction with Wöhler, the oil of bitter almonds and its combinations. These different researches conducted him to the largest theoretical views on the organic radicals, on the nature of organic acids, and finally on the phenomena of fermentation and spontaneous combustion, as well as on the metamorphoses of organic nature in general. Of late years he was chiefly occupied with the application of these different results to the chemical side of animal and vegetable physiology, as well as with a total reform of those sciences in relation to agriculture and pathology. The reception universally accorded to his published writings in this field proved that he had attained his end, which was to demonstrate the necessity of a reform and to arouse the spirit of research in the new path which he had opened. Liebig himself admitted that, in consequence of the discussions he had provoked, many of the deductions from his theories would be modified. "His individuality," says a distinguished French chemist, "which lends him such a charm, his ardent enthusiasm for the aim he thinks just—an enthusiasm which can entertain no consideration short of scientific truth—eminently qualify him for his mission, that of giving the initiative to science." Attacks, not always unjust, he has certainly provoked; errors not a few he has mingled with his discoveries; the commercial spirit even has occasionally been too prominent in his undertakings. But these sink into insignificance before the mass of scientific truth which he has originated, and which will transmit his name to posterity as one of the mightiest chemists of modern days. Even were his discoveries less brilliant than they are, his contributions to scientific method would alone perpetuate his name—contributions which embody everything that is logically sound in the various systems of inductive research, from Aristotle to Bacon, and from Bacon to Comte.

His writings are very voluminous, and not more voluminous than valuable. The mere titles of them fill five densely printed columns in Poggendorff's "Biographisch-literarisches Handwörterbuch." In addition to those we have mentioned, we may cite his "Anleitung zur Analyse der organischen Körper"; his "Wörterbuch der Chemie," in which he was materially aided by Wöhler and Poggendorff; his "Handbuch der Pharmacie"; his "Thierchemie"; his "Handbuch der organischen Chemie, mit Rücksicht auf Pharmacie"; his "Chemische Briefe"—a favourite of the educated world in so many different languages; his numerous pamphlets on agricultural chemistry and the utilisation of sewage, and on that culinary preparation known and used all the world over as Extractum Carnis. To the columns of THE LANCET he was a frequent contributor, making them the medium of communicating most of his views to the British public; while his co-operation, written and unwritten, was constantly invoked by the late Prince Consort in his scientific enterprises.

Baron Liebig was interred on Sunday afternoon in the cemetery of the city of Munich. In spite of the weather, rainy and inclement as it was, the people of the South German capital assembled in thousands to pay a last tribute of respect to the obsequies of their illustrious fellow-citizen. The coffin, covered with flowers, was borne to the grave by a procession which included many of his most distinguished countrymen; and it was lowered into the vault in presence of all the civil and military authorities, the judges, magistrates, and all the professors of the various colleges in the city. The Rector of the University, the distinguished Catholic divine, Dr. Döllinger, was present; while a Lutheran minister read the burial service; and an *oraison funèbre* was pronounced over his grave.

DR. HENRY BENCE JONES.

THE profession will hear with profound regret that this able and accomplished physician died of cardiac dropsy on the evening of Sunday, the 20th inst.

Of honourable parentage, Henry Bence Jones was born at Thorington Hall, Yoxford, Suffolk, in 1814. His education was a comprehensive and sound one. From 1826 to 1831 he received the best classical training that Harrow could give, and in 1832 he entered at Trinity College, Cambridge, where he graduated as Bachelor of Arts in 1836. From Cambridge he proceeded to London, and commenced his studies in medicine at St.George's Hospital. Shortly thereafter he worked in Professor Graham's laboratory, under the late Mr. Fownes, and in 1841 he went to Giessen to enjoy the benefit of Baron Liebig's tuition in a school of chemistry which had already attracted students from every quarter of the globe. Fresh from this admirable experience, to which he owed a knowledge of German science and scientific authorities which stood him in valuable stead all his life through, he returned to England, and passed as Licentiate of the Royal College of Physicians. In 1842 he proceeded to his Master's degree at Cambridge, and two years afterwards passed his examination for graduation in medicine at the same seat of learning. In 1845 he was appointed physician to St. George's Hospital, and in 1846 was elected a Fellow of the Royal Society. In 1849 he graduated as M.D. at his *alma mater*, and in the same year became a Fellow of the Royal College of Physicians. All this time he was devoting special study to pathological chemistry, his first paper on "Cystine Calculus" appearing in the Medico-Chirurgical Transactions for 1840. Five years later he published in the Philosophical Transactions another paper on the "Variations of the Alkaline and Earthy Phosphates, and on the Alkalescence from Fixed Alkali."

Pathological chemistry was much to him as a teacher also. In 1849, at the conclusion of a chemical course, he delivered a series of twelve lectures on "Animal Chemistry," in its application to stomach and renal diseases, and published them in the year following. In particular, the chemistry of the urine engaged his attention, and he was among the most authoritative in insisting on the paramount importance of urinary analysis in diagnosing disease. The microscope was another diagnostic instrument which he never failed to recommend by precept and example to his students; and there are many practitioners, both at home and abroad, who testify enthusiastically to the salutary inspiration of his prelections.

In 1852 he contributed to a contemporary the results of a series of researches on the "Nature of Diabetes," in which he showed that sugar is still found in the urine "though sugar-forming food is withheld from the patient"; while he suggested that the disease might be due to an arrest of the action of oxygen on the non-nitrogenous constituents of the food and tissues. In the same organ, as also in the *Provincial Medical and Surgical Journal*, he published his conclusions on the "Varieties of Alkaline Urine," a subject which, in 1849, he had already treated partially in a paper read before the Royal Society. In 1852 he followed up this treatise by another, also read before the Royal Society, on the "Solution of Urinary Calculi in Dilute Saline Solutions, at the Temperature of the Body, by the Aid of Electricity."

Intermittent Diabetes and the Diabetes of Old Age, were the subjects of an important article contributed by him, in 1853, to the Medico-Chirurgical Transactions, in which he exposed the "fallacy of calculating merely by specific gravity the quantity of sugar present in the urine." Diabetes he considered to be due to a suboxidation, affecting at first the non-nitrogenous and ultimately the nitrogenous constituents of the food and textures; and he recommended in treatment the free use of alkalies and iron. The diagnosis of renal calculus, as well as that of malignant and scrofulous diseases of the kidney, was the next subject of his researches, in which he showed his mastery of microscopic analysis. In this field he continued to labour assiduously, and published many papers in the Proceedings of the Chemical and Royal Societies, as well as a course of lectures on the Connexion of Chemical and Mechanical Disease. With the spectrum analysis he also worked in the detection of substances on their passage into and out of the

tissues, and strengthened the view that there is a chemical circulation in the body, while giving much clearer views as to the action of food and medicines.

Dr. Bence Jones's independent publications are also numerous. Among them we may mention his works on "Gravel and Gout," on "Animal Electricity," on "Digestion, Respiration, and Secretion," his translation of "Mulder on the Chemistry of Wine," his treatise on "Pathology," and his masterly "Memoirs of Faraday." The last-named book, which we reviewed at great length on its first appearance in 1869, is quite a model of a scientific biography, and testifies to the affectionate relations which subsisted between its author and the greatest of recent physicists.

Honours he possessed in abundance. In addition to his connexion with St. George's, he was corresponding member of the Physical Society of Berlin, and of the Société de Biologie of Paris; Vice-President of the Royal Medical and Chirurgical Society, sometime Vice-President of the Chemical Society, Honorary Secretary to the Royal Institution, and Secretary to the Royal Society.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College on Tuesday and Wednesday last:—

Ashby, Henry, Croydon.
Baines, Egerton C. A., Lincoln.
Bark, Ernest O., Leicester.
Bennett, William E., Stoke, Devonport.
Bevers, Edmund A., L.S.A., Oxford.
Bindley, Cecil Alexander, Brighouse, Yorks.
Birch, Edward Arnold, Manchester.
Birch, Robert, L.S.A., Litchfield.
Blake, Samuel H. Blake, Birmingham.
Bomford, Gerald, L.A.S., London.
Bowkett, William D., L.S.A., Poplar, Middlesex.
Brumwell, James P., L.R.C.P. Ed., Kendal.
Burchell, Edmound, Leeds.
Cheesewright, John F., L.R.C.P. Ed., Sturminster, Newton.
Collins, Henry Beale, L.S.A., Bessborough-street.
Dickinson, William W., L.S.A., Uffculme, Devon.
Donkin, Horatio Bryan, Blackheath.
Fowler, Bream W., St. Helena.
Garrard, William Arthur, Tickhall, Derby.
Greensill, Edward S., Great Witley.
Hardy, M. W., London.
Hetley, Henry, Norwood, Surrey.
Homan, George W., Surbiton.
Johnson, Tom George, Brigg, Lincolnshire.
Jordan, Frederick William, Manchester.
Lingard, Alfred, Derby.
Mercer, Adolphus R. C., Walton.
Milner, Edward, Norwood.
Murphy, George, Carlisle.
Paradise, Thomas D., L.S.A., Stamford.
Perkins, Henry A., M.B. Ed., Faversham.
Pinching, Charles W., L.S.A., Gravesend.
Pocock, Frederick E., Bow, Middlesex.
Pughe, Rhinaltt N., Liverpool.
Rât, Joseph Numa, Newcastle, Staffordshire.
Raye, Thomas Matthew, Dublin.
Rayne, Charles A., Kendal, Westmorland.
Rogers, Hildyard, Grimston, Yorks.
Savory, Arthur H., Wendover, Bucks.
Scott, Thomas Bodley, Brighton.
Shapley, Henry T., L.R.C.P. Ed., Torquay.
Snagge, Richard, L.R.C.P. Ed., St. Vincent, West Indies.
Stevenson, Edward S., Cape of Good Hope.
Stockwell, George T., Nottingham.
Taylor, Robert F. S., Staleybridge.
Tordaff, Hardy T., Bradford, Yorks.
Welford, George Edward, M.B. Aberdeen, Sunderland.
Wood, John Edward, London.
Wood, William J. H., L.R.C.S. & L.R.C.P. Ed., Boston.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on April 17th:—

Cooke, John, Hoxton-street.
Davey, Charles James, Witham, Essex.
Dickinson, William Wood, Uffculme, Devon.
Lucas, John Catchick, Russell-square.
Lyddon, Charles, Albion-grove, Barnsbury.
Pinching, Charles J. William, Gravesend, Kent.

As Assistants in Compounding and Dispensing Medicines:—

Allen, Charles Bowen, Richmond.
Dixon, Henry Benjamin, Nottingham.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Bevan, Adolphus, Guy's Hospital.
Brown, George, Charing-cross Hospital.

COLLEGE OF PHYSICIANS, IRELAND.—At examinations recently held the following gentlemen obtained the licences in Medicine and Midwifery:—

MEDICINE.—Edward Maurice Day, James Howard, George Wm. Joseph, William Geo. Lemuel Law, Henry Lowndes, Archibald M'Kinlay, James Emerson Reynolds.
MIDWIFERY.—Edward Maurice Day, William George Lemuel Law, Henry Lowndes, William Mac Dowell, Archibald M'Kinley.

THE Hon. Mr. Justice Honyman will preside at the annual festival of King's College Hospital, to be held at Willis's Rooms, on Thursday, June 19.

HENRY BARNETT GEE, M.R.C.S., of Blackheath, retired from practice, has been placed on the Commission of the Peace for the county of Kent by the Lord-Lieutenant, Lord Sydney, K.C.B.

METROPOLITAN FREE HOSPITAL.—The annual meeting of this institution was held on Tuesday evening under the presidency of Mr. Alfred de Rothschild. The report showed that during the past year 88,000 patients had received medical relief. At the close of the evening subscriptions to the amount of £4500 were announced, in which was included a sum of £1000 from an anonymous donor.

DONATIONS TO MEDICAL CHARITIES.—The Asylum for Idiots has received a fifth £1000 from "N. C. K." The Seamen's Hospital Society has received another £1000 from "E. R." Mr. Joshua Appleyard has given £1000 to the Halifax Infirmary, as the nucleus of a fund for the maintenance of convalescent patients at such homes as may be selected. St. Mark's Hospital for Fistula has received a fourth £1000 from "E. N." The Royal Free Hospital has received a fifth £1000 from "D. G." The Royal Infirmary for Diseases of Women and Children has received a fourth £1000 from "E. F. S." The Worshipful Company of Fishmongers have granted fifty guineas towards the building of the chapel for the patients of the Royal National Hospital for Consumption, Ventnor, Isle of Wight.

Medical Appointments.

BELLAMY, E., F.R.C.S.E., has been appointed Teacher of Operative Surgery at Charing-cross Hospital.
COWELL, G., F.R.C.S.E., has been appointed a Surgeon to the Westminster Hospital, vice Holt, resigned, and appointed a Consulting Surgeon.
DEVILLE, T., M.D., M.R.C.P.Ed., has been appointed Medical Officer of Health for the Harrogate High and Low Urban Sanitary District: £100 per annum.
DOMENICHETTI, R., M.D., has been appointed Public Analyst for the Borough of Louth, Lincolnshire.
FENTEM, P. S., M.D., has been appointed Medical Officer of Health for the North Division of the Bakewell Rural and Urban Sanitary Districts, combined.
FERRIS, E., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Athy Dispensary District of the Athy Union, Co. Kildare, vice Clayton, deceased.
FISHER, G., M.R.C.S.E., has been appointed Surgeon to the Thames Goldfield Hospital, Auckland, New Zealand.
GAYLOR, E., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed a Medical Officer of Health for the Belper Rural Sanitary District: £180 per annum.
HUGHES, W. R., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Senior House-Surgeon to the Royal Southern Hospital, Liverpool, vice H. Harvey, M.B., L.R.C.S.Ed., resigned.
MURDOCK, P. A., M.B., C.M., has been appointed House-Surgeon to the Chichester Infirmary and Dispensary, vice Scoresby-Jackson, resigned.
PERSTON, W. A., M.D., has been appointed Physician to the Thames Goldfield Hospital, Auckland, New Zealand.
SANSOM, A. E., M.D., M.R.C.P., has been appointed Consulting Physician to the Islington and North London Provident Dispensary.
SMITH, T., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 4 of the East Grinstead Union, and District No. 5 of the Horsham Union.
THOMPSON, P., L.R.C.P.Ed., M.R.C.S.E., has been appointed a Junior Resident Medical Officer to the Royal Free Hospital.
WILLIAMS, W., M.D., M.R.C.P.L., M.R.C.S.E., has been appointed Junior House-Surgeon to the Royal Southern Hospital, Liverpool, vice Hughes, promoted.
WORTHINGTON, T. B., M.B., C.M., has been appointed a Junior Resident Medical Officer to the Royal Free Hospital.

Births, Marriages, and Deaths.

BIRTHS.

DUCKWORTH.—On the 21st inst., at Grafton-street, Piccadilly, the wife of Dyce Duckworth, M.D., of a daughter, who survived only fourteen hours.
EDMONDS.—On the 23rd inst., at Southampton-street, Camberwell, the wife of Charles George Edmonds, L.R.C.P.L., M.R.C.S.E., of a daughter.

GLOVER.—On the 22nd inst., at Compton-terrace, Highbury, the wife of James Grey Glover, M.D., of a son.

HARMER.—On the 23rd inst., the wife of W. Milsted Harmer, M.R.C.P., Physician and joint Proprietor, North-grove House Private Asylum, Hawkhurst, of a daughter.

HARRISON.—On the 19th inst., the wife of A. J. Harrison, M.B., M.R.C.S.E., of Ablewell-street, Walsall, of a daughter.

MARRIAGES.

GARLAND—PATON.—On the 15th inst., at the Tower, Portobello, Ormond Haldane Garland, M.B., C.M., of Leith, to Eliza Lindsay, daughter of the late Hugh Paton, Esq., of Edinburgh.

POWER—MADDEN.—On the 18th inst., at St. Stephen's, South Dulwich, Frederic Douglas Power, M.R.C.S.E., of Cleator, Cumberland, second son of Wm. Henry Power, M.D., of Ladywell, Kent, to Julia Charlotte, fourth daughter of Chas. Madden, Esq., of Bonn, Surgeon Bengal Army, retired list.

DEATHS.

CARRUTHERS.—On the 19th ult., Joseph Carruthers, L.R.C.P.Ed., M.R.C.S.E., of Portland, Dorset, aged 58.

EVANS.—On the 19th inst., Paulina, third daughter of Chas. Evans, F.R.C.S., of Bakewell, in her 16th year.

FREER.—On the 17th inst., at Danesford, Bridgnorth, Frances, relict of John Freer, M.D., and eldest daughter of the late Wm. Whitmore, Esq., of Dudmaston, Bridgnorth, in her 94th year.

HARRISON.—On the 23rd inst., W. A. Harrison, F.R.C.S.E., of Keppel-street, aged 72.

JONES.—On the 20th inst., at Brook-street, Grosvenor-square, H. Bence Jones, M.D., F.R.S.

MOLESWORTH.—On the 17th inst., T. E. Molesworth, M.D., Surgeon R.N., of Porchester, aged 59.

Medical Diary of the Week.

Monday, April 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ST. PETER'S HOSPITAL FOR STONE AND DISEASES OF THE GENITO-URINARY ORGANS.—3 P.M. Three Cases of Lithotrity.
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. T. S. Dowse, "On a Case of Cerebro-Spinal Meningitis terminating in Gangrene."—Mr. Spencer Watson, "On some Subjective Symptoms of Eye Disease, with Experiments."—Dr. Symes Thompson, "On Cases of Perityphlitis."

Tuesday, April 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Daunreuther, "On Music of the Drama."

Wednesday, April 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, May 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Annual Meeting.
HARVEIAN SOCIETY OF LONDON.—7½ P.M. Special Council Meeting.—8 P.M. Ordinary Meeting; casual communications; and renewed discussion on Mr. Lawrence's paper "On Infantile Diarrhœa."

Friday, May 2.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—9 P.M. Professor Reynolds, "On Alcohols from Flints."

Saturday, May 3.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Odling, "On Ozone."

Notes, Short Comments, and Answers to Correspondents.

THE NEW INSTRUCTIONS FOR RECRUITING.

In the new Recruiting Instructions just published it is laid down that in every town or place of sufficient importance a civilian medical practitioner shall be appointed to examine recruits, and after selections are made the officer commanding the brigade depôt will forward the names to the Adjutant-General, that it may be ascertained if the medical practitioners be registered according to Act of Parliament; those already appointed by the Adjutant-General, as shown in the published book, to be retained. In making recommendations for new appointments, the preference is to be given to militia, yeomanry, and volunteer medical officers, if resident at the out-station. The necessary instructions for medical examinations will be sent to the civilian medical practitioners, who are requested to assist men desirous of enlisting by giving them information where to apply. Army medical officers will not fail to notice that the regulations in regard to the chest measurement of recruits have undergone modification. The military authorities have previously had the responsibility of ascertaining that these measurements as regards standard and chest were in accordance with the schedules published in General Orders. And such is still the case; but we perceive that the medical officer of the brigade depôt is to be instructed to enter (in pencil) the chest measurement made by him, and his opinion of the man's age, in order to assist the officer commanding the brigade depôt in forming his judgment. But the medical officer is not held responsible for any ultimate rejection or for any decision contrary to the opinions he may have given. The medical officer will also note on the attestation his opinion whether, judging from the medical inspection, or from the general appearance of the recruit, the man has previously served.

R. W., (Dublin.)—Sea-sickness might probably bring on labour prematurely.

OPHTHALMIA IN SCHOOLS.

To the Editor of THE LANCET.

SIR,—In the correspondence which has recently been carried on concerning ophthalmia in schools, I see no mention made of the possibility that the disease may sometimes at least be factitious. In convict prisons this phase of malingering is not at all uncommon; and I have been informed by prisoners who, at the outset of their criminal career, have been confined in reformatories, that in these establishments "faking" the eyes, as it is called, is frequently resorted to as an expedient to obtain exemption from lessons or admission into the sick ward. As it is next to impossible to distinguish with certainty between factitious and genuine conjunctivitis, unless indeed the irritating substance be found, it is quite possible that in some instances the real nature of the case may not be suspected. At all events one can readily imagine that if a few boys in a school are addicted to this form of malingering, and if by this means they procure exemption from certain disagreeable tasks, they will soon have plenty of imitators. On no other grounds, it appears to me, can the prevalence and persistency of the disease be very well accounted for. It is quite true that I may be altogether wrong in my surmises; but to prove that ophthalmia in schools has sometimes had a factitious origin, I may be allowed to quote the following passage from Gavin's work on Feigned Diseases: "In many of our public establishments the practice of exciting ophthalmia for the purpose of procuring some desired end is perfectly understood, and is frequently resorted to. In the London Orphan Asylum I have not unfrequently found the children aggravating a catarrhal ophthalmia, or protracting their cure, for the purpose of remaining in hospital, and avoiding school. In a public establishment in India, the name of which I am not at liberty to mention, on a statement from the surgeon that the ratio of sickness was very great, and arose from the unhealthiness of the situation, it was found on investigation by a Board of medical officers that considerably more than 500 in 900 cases of illness were cases of ophthalmia, and that the disease was extensively excited by introducing tunam (a species of lime) into the eyes."

Your obedient servant,
GEORGE WILSON, Medical Officer.
H.M. Convict Prison, Portsmouth, April 22nd, 1873.

*** We do not in the least believe that the ophthalmia is of factitious origin. It is a genuine disease, the spread of which is to be accounted for by contagion, the defective constitutional vigour of the class of children found in our large pauper schools, and the existence of defective hygiene. ED. L.

To the Editor of THE LANCET.

SIR,—In the letter from me, which you inserted in your issue of last week, the number of children at Forest-gate school is by a mistake printed 340; it should be 840. I should not trouble you but that the numbers are of great importance in the question I have ventured to ask.

Yours faithfully,
Stratford, E., April 20th, 1873. THOMAS J. VALLANCE.

A CASE OF DISTRESS AT PEYMOUTH.

DR. DALE has received £1 from B. W. Wellings, Esq., Cosham, for the widow and her children, making altogether £4.

Deutsch.—There is no foreign journal exactly comparable with THE LANCET. Perhaps the "Wiener Medizinische Zeitung" or the "Berlin Klinische Wochenschrift" might be found serviceable. If our correspondent wishes to keep abreast of German work, he should take in "Virchow's Archiv" and the "Centralblatt." Perhaps the little "Praktische Arzt" would serve his turn if he be not a good German scholar.

Mr. W. Mackay.—Consult a medical man.

CHEMISTRY AT THE ROYAL SOCIETY.

SOME new results of extreme interest to chemists were communicated to the Royal Society by Sir Benjamin Brodie on April 3rd. A mixture of hydrogen and carbonic oxide was submitted to the action of electricity in an induction tube. A contraction of volume soon took place, and after five hours the mixture was found to contain 6 per cent. of marsh gas, the formation of which is expressed by the equation $CO + 3H_2 = CH_4 + H_2O$. A similar experiment made with carbonic anhydride and hydrogen yielded water, carbonic oxide, and a minute quantity of formic acid, the formation of which is explained as follows: $CO_2 + H_2 = CH_2O_2$. Even more interesting were the results obtained by the action of induced electricity on pure carbonic oxide. Contraction took place regularly at the rate of about 5 cc. per hour; carbonic anhydride was formed, and with it a transparent red-brown substance, which lined the tube. This substance turned out to be a new oxide of carbon, lower than any previously known. Its composition varied in different experiments; but it could always be expressed by the general formula C_nO_{n-1}. Two distinct bodies were identified by analysis—namely, C_4O_3 and C_3O_2. The series is described by its discoverer as "an homologous series of 'oxy-carbons,' of which the unit of carbon with its weight 12 may be regarded as the first term, and of which the adjacent terms differ by an increment of carbonic oxide (CO), weighing 28, precisely as homologous series of hydrocarbons differ by the increment CH_2 with the weight 14." The bodies are, therefore, oxygen-analogues of the acetylene series of hydrocarbons. These curious solid oxides are soluble in water, giving strongly coloured and very acid solutions. The author tells us nothing of the nature of the acids which are formed; but the two oxides described have the composition of the previously unknown anhydrides of mellitic and croconic acids, $C_6H_2O_6$ and $C_5H_2O_5$. The formation of the first of these anhydrides might be described thus: $5CO = C_6O_3 + CO_2$.

H. W. F. (Bath) is thanked for his communication. Dr. Ringer will doubtless put the matter on its right footing; while, as for ourselves, we admit no alteration of tone in our comments on homœopathy.

THE COEXISTENCE OF CARBUNCLE AND GOUT.

To the Editor of THE LANCET.

SIR,—In September last I was called to attend a man, aged forty-eight, with a large carbuncle situated on the left of the fourth cervical vertebra. He had then been suffering from it nearly a week, and had at first taken but little notice of it. The pain and constitutional disturbance, however, compelled him to seek advice. He had taken no medicines, and had applied an occasional poultice, thinking it was only an abscess. His constitution appeared bad; he looked anæmic and ill, with thirst and loss of appetite. Only remembers having had one serious illness, six years ago—rheumatic fever; suffers from dyspepsia, and said he had always been a temperate, hard-working man.

Sept. 17th.—The carbuncle presents an angry appearance, having about twenty orifices, the edges highly inflamed, the whole mass about the size of a large orange. A deep crucial incision was made through it, and linseed-meal poultices were kept constantly applied, containing carbolic acid. Ordered to take a mixture containing tincture of perchloride of iron and quinine three times a day, a generous diet, and brandy-and-milk twice a day. This treatment was continued until the 23rd instant with no apparent benefit.

24th.—A change of treatment is necessitated in consequence of a severe attack of gout in both feet supervening suddenly, the pain from which is very severe. Urine found to be loaded with urates. On being questioned, says he has never had gout before, neither does he remember any of his family having suffered from it. Ordered a mixture containing bicarbonate of potash, nitrate of potash, colchicum wine, and the sedative solution of opium every four hours; and the brandy to be discontinued.

Oct. 2nd.—Under this treatment the carbuncle at once assumed a much healthier aspect; the sloughs soon came away, healthy granulations sprang up wonderfully fast, and the pain quite subsided. It is now the size of a small apple. The gout symptoms have disappeared, and the man is enjoying his food, and says he feels better than he has done for years.

Having mentioned the case to many professional friends, and finding they have never met with such an instance, I am induced to send it for publication, hoping that you, Sir, or any of the numerous readers of THE LANCET, may explain the diathetic influences at work which determined the outburst of two coexistent morbid conditions, generally looked on as dependent on dissimilar states of the system. I am, Sir, yours truly,

Plympton, Devon, April, 1873. R. ELLERY, L.R.C.P., &c.

MEDICAL SOCIETY FOR SOUTH DURHAM AND CLEVELAND.

THE members of the profession practising in South Durham and Cleveland have for some time past felt the want of opportunities of meeting together for the discussion of professional and ethical matters. A well-attended meeting of those interested in the formation of a medical society was held at the North Riding Infirmary at Middlesborough on the 10th inst., when it was decided to establish a South Durham and Cleveland Medical Society. Rules were adopted, officers elected, and it was determined to have an inaugural dinner in the early summer. The members of the profession are invited to communicate with the honorary secretaries. The following is the list of officers:—President: J. W. Eastwood, M.D., M.R.C.P., Dinsdale-park, Darlington. Vice-presidents: T. W. Craster, M.D., Middlesbro'; Charles Trotter, F.R.C.S. Eng., Stockton. Honorary Secretaries and Treasurers: J. Ellerton, M.D., Middlesbro'; R. W. Foss, M.D., Stockton. Committee: J. Farquharson, L.R.C.P. Ed.; J. Hedley, M.R.C.S.E.; H. Hind, M.R.C.S.E.; J. Laidler, M.R.C.S.E.; D. C. Odlum, M.B., B.A.T.C.D.; T. R. Pearson, M.D.; J. P. Sleighholme, L.R.C.P. Lond.; J. A. Storey, L.R.C.S.I.; and R. Torbock, L.S.A.

Enquirer.—Reason suggests the use of the title, and we know of nothing in law to forbid it.

THE BARONY WORKHOUSE HOSPITAL, GLASGOW.

A CORRESPONDENT directs our attention to a vacancy in the above hospital, which he remarks has not been advertised in the *Glasgow Herald*, the leading journal of the district, or in any of the papers in general circulation, but solely, as far as he is aware, in one purely local journal. The salary offered is £300 per annum, and the clinical field is an admirable one. In addition, he directs our attention to the fact that a certain number of lunatics are included in the medical charge, and that a preference is to be given to gentlemen who have had previous experience in such cases. It is stated that at some future date the lunatics are to be removed. Our correspondent asks whether the guardians think that a medical man fit to take charge of a large general hospital is equally fit to assume charge of lunatics, and combine the information of the alienist with the skill and acquirements of the operating surgeon. On the previous occasion of a vacancy at the same institution, our correspondent states that an immediate relative of the out-going incumbent was appointed. The selection made might have been, and probably was, a very good one; but men with large surgical and medical experience applied in answer to the advertisement, but, of course, without avail. Our correspondent trusts that we will insert his communication, because he considers that such excellent fields for clinical study should not be converted into private and local posts, by which both patients and the profession may be the sufferers.

A Country Surgeon.—Does our correspondent object to his name being attached to the communication he has forwarded to us?

STUDENTS AND THE MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—I see that in your current number you publish a short comment upon a note received from "A Puzzled Student" anent the fee of £5 5s. which we are compelled to pay to the Medical Council on registration. Your correspondent is, I can assure you, not the only "puzzled" or indignant one on this point; and I have no hesitation in saying that no fee in the whole course of professional education (and there are a good many) is more unpopular or more begrudged than the one in question. We have nothing to show for our money. We gain no protection, or any other advantage, by paying it. We pay, for a certain time in each year, the expenses of a number of men, standing high in the profession, who can well afford to pay their own. And, lastly, all the conditions of registration are one-sided, and rather *against* than *with* the profession. If we are guilty of felony, or infamous professional conduct, our names may be removed from the Register; and if we venture to move from No. 12 across the street to No. 24 without giving due notice to the Medical Council, we are liable to be treated in the same way as condemned felons and those guilty of "infamous professional conduct," and have our names removed from the Register!

Suppose a man's name to be removed from the Register—what then? Does it prevent him from practising? Apparently not. Suppose a man whose name has been removed from the Register enter into partnership with a quack, and the two locate themselves next door to a registered practitioner, will the Medical Council protect the registered practitioner? I believe not; and that if the registered practitioner wishes to prosecute Quack and Co., he must do it himself, and at his own expense.

It is, of course, patent to everybody that it is highly desirable that there should be an accurate list of qualified practitioners, and every man's name should be placed upon this list as soon as qualified on payment of a nominal fee—half a guinea would be ample. Five guineas is rather a large sum to pay for the gratification of seeing one's name in a printed list. But what are we to do? For obvious reasons, those *in statu pupillari* are not likely to raise an united voice, nor are qualified men, scattered as they are all over the globe. We have but one resource—the press; and the press might do much. Would it but lift its voice on our behalf, it would earn the hearty thanks of many a poor student, and of many an Englishman who objects to taxation with no commensurate advantage, and, amongst others, of

Your obedient servant,

April 19th, 1873. A BART.'S MAN.

OVERCROWDING IN DEATH.

THE attention of the Government inspector of burial grounds may with advantage be directed to a statement which appeared recently in the *Wimbledon and Merton Advertiser*, to the effect that in the churchyard of Merton interments are being made under circumstances which are not merely revolting to the feelings, but are likely to be prejudicial in a sanitary point of view. It would seem that the churchyard is so excessively crowded with the "forefathers of the hamlet" that in digging the shallowest graves "portions of human remains are turned out with the soil." Mr. Holland should see to this. Overcrowding of the living must, we fear, be accepted as an inevitable condition of residence in great cities and towns, at least for a long while to come; but land is surely not so precious in a comparatively rural place like Merton that the dead should be huddled into their graves one upon the other for lack of room to give each inhabitant decent burial.

Lena.—We are informed that the award of the "Alexander Prize" for officers of the army has not yet been made public. A good deal of time is consumed in the perusal of the various essays by adjudicators.

Mr. John Nunn.—Thanks. Next week.

THE AUTUMN MANŒUVRES.

To the Editor of THE LANCET.

SIR,—Will you or any of your readers who took part in the Autumn Manœuvres of the last two years kindly recommend the best kit within the required weight for a militia officer who will be out on Dartmoor with his regiment this summer—such kit to include sleeping requisites and absolute necessaries, plain and serviceable?

I am, Sir, your obedient servant,

April, 1873. A WEST COUNTY MAN.

THE NEW ARMY MEDICAL WARRANT.

WE regret that want of space must prevent us from inserting a lengthy report forwarded to us last week of a meeting of medical officers recently held to consider the provisions of the new Warrant, at which several of the clauses contained in that document were unanimously condemned. We have also received a very temperately written pamphlet, entitled "Notes on the New Medical Warrant," and several communications from correspondents on the same subject. Our army medical readers will, however, perceive that we have discussed the question this week from an editorial point of view. We share with them the disappointment which the late regulations have caused, having entertained the strong hope of better things which the War Minister's speech in introducing the army estimates awakened. Our correspondents, whether adopting or not the principle which Mr. Cardwell's reorganisation seems to recognise, are at one as to the injurious and harsh nature of the conditions with which he has accompanied it. Our advice to them is to get the subject ventilated in Parliament with the view of obtaining some authoritative expression as to the exact meaning of the clauses complained of. We shall then be better able to judge whether the occasion of reorganising the department has been used for singling it out for exceptional treatment or not. If the Government explanations be of an unsatisfactory character, we shall, in the forthcoming election, know how to proceed.

Mr. J. F. Clarke may consult the following books:—Attfield's Chemistry, Garrod's Materia Medica, Therapeutics by Dr. Sydney Ringer, Parkes on Hygiene, Dr. Grailly Hewitt on Diseases of Women.

A.—The overseer can have no right to give an order to a medical man not the medical officer of the union.

Mr. G. D. Harding.—For death certificates please read vaccination certificates. The provocations alleged by Mr. Harding do not justify his advertising. Evil is to be overcome with good.

PLUGGING THE POSTERIOR NARES.

To the Editor of THE LANCET.

SIR,—I notice in THE LANCET some articles regarding plugging the nostrils by elastic bags, which are afterwards inflated. The idea has been carried into practice here long ago, and in a very simple way, by the late Dr. W. E. Coale, of Boston, U.S.A. Dr. Coale's plan was this: A piece of the small intestine of a pig is properly cleaned, and then kept in a wide-mouthed bottle filled with alcohol. When required for use, cut off a bit of sufficient length, tie a string round one end to close it tightly, put a long probe into it, and pass it along the floor of the nostril to the pharynx. Now, with a common pewter syringe, fill the bit of gut with cold water, tie up the open end, and leave it as long as it may be required.

Thudichum's nasal douche is the best of all means for checking nasal hæmorrhage. Ice-cold salt-and-water run through the nostril for a sufficient length of time—i.e., until the water comes through clear—will hardly ever, if ever, fail. Bleeding from the nose is often kept up by the presence of a great clot causing hæmorrhage, just as a uterine clot, or a clot in an open wound, does; and the bleeding is to be stopped in just the same way—i.e., by removal of the clot. With the nasal douche, after the stream has gathered force enough, one often sees the large long clot discharged, and the bleeding cease almost immediately. It was in this way that Dr. Henry Oliver, of Boston, U.S.A., checked nasal hæmorrhage in the case of the late Bishop Fitzpatrick when all other ordinary and extraordinary means had failed. It has served me also many a good turn in the same way. Clot as an efficient agent in keeping up hæmorrhage is well known to all surgeons. The late Mr. Fred. Skey used to tell a story of his having been called to St. Bartholomew's Hospital at night to see a man who had undergone some operation in the axilla during the day. Bleeding had been and still was going on, and it was thought the artery must be tied below the clavicle, but Mr. Skey roughly pulled away the sponges, and removed a great clot, when all loss of blood at once ceased.—Yours, &c.,

Boston, April 4th, 1873. W. C. B. FIFIELD, M.D., &c.

THE LIBERTY OF PATIENTS.

D. M. R.—A patient has perfect liberty to have any doctor he pleases, within reasonable limits, and to change his doctor when he thinks fit, provided that it is done courteously. There seems a defect in the statement sent to us, for we are not told how E. F. came to be informed that A. B. wanted him to attend him. A. B. is clearly at fault in not being candid with his adviser. It is infinitely better and more respectful to a medical man to make a change than to go on secretly disparaging him, and hankering after another medical adviser. No right-minded medical man would be willing to advise a patient who did not respect his advice, or who systematically preferred the advice of another practitioner. It is the privilege of the practitioner as well as of the patient to be independent.

Mr. A. Gabriel, (Edinburgh.)—A qualification in Medicine and Surgery is required. The date of the next competitive examination for the Indian Medical Service has not yet been announced.

EFFECT OF CARBOLIC ACID ON THE URINE.

To the Editor of THE LANCET.

SIR,—In reply to Mr. Nicholl's question as to the peculiar effect produced on the urine by the application of carbolic acid to raw surfaces, I beg to refer him to a paper by me in THE LANCET of Sept. 16th, 1871, on "Excision of the Shoulder-joint," in which I have noticed the appearance of the urine alluded to by him, and I have also given an extract from a letter to me from Professor Lister on the same subject. I do not profess to explain the cause, and it is by no means uniform, for I have now under treatment a case of granulating wound from the removal of cancerous mammæ, to which carbolic oil (one to four) has been freely applied since the operation, nine days ago, and as yet no such effect has been produced upon the urine, which, however, has been charged freely with lithates.

I remain, Sir, yours faithfully,

Cerne Abbas, April 14th, 1873. JOHN EWENS, L.R.C.P.

AN OPENING FOR WOMEN.

A CORRESPONDENT informs us that a lady has been appointed deputy-registrar of births and deaths in a London sub-district, with the sanction of the Registrar-General and the full concurrence of the Local Government Board. Why not? Have we not read that a lady was appointed an enumerator in London at the last census, and that she discharged her duties very efficiently? There is a large field for women in some branches of the public service, and we should not be surprised to see before many years are over a considerable movement in that direction. There are two or three thousand registrars throughout the country, and each of them has a deputy, so that Major Graham may probably reckon upon an enlargement of his official experience in the direction of feminine correspondence. Many women have great aptitude for routine duties, which men commonly find so irksome.

M.R.C.S.—We think the claim good, and one that would be recognised in a court of law.

ABSENCE OF THE PECTORALES.

To the Editor of THE LANCET.

SIR,—In your issue of March 29th I observed an article by Mr. Tweedy "On a Case of Absence of the Thoracic portion of the Pectoralis Major and the whole of the Pectoralis Minor Muscle." A short time ago I happened to have a case somewhat similar, which, as it seems to be a rather rare anomaly, I send you an account of.

My patient was a young man, aged eighteen, an ironworker, whose chest I had occasion to examine, as he exhibited symptoms of incipient phthisis. I was at once struck with the total absence on the left side of the muscles which form the anterior boundary of the axilla—viz., the pectorales major and minor. On abducting the arm, the axillary artery could be felt beating directly under the skin. The circumference of the chest, on a level with the nipples, was twenty-nine inches, of which the left side made up fourteen, and the right fifteen, inches. The patient complained that the left arm got tired and stiff much sooner than the right. The muscular deficiency was most apparent when the patient was directed to abduct the arm, and move it horizontally in front of him. This latter motion seemed to be effected chiefly by the clavicular portion of the deltoid, and was feeble and undecided. The lad's father said he had not noticed the peculiarity in any other member of the family. Yours truly,

Darlington, April 14th, 1873. ALEX. FORSYTH, M.B.

Health Officer.—We are not aware of any statutory provision which would enable a sanitary authority to interfere in the case mentioned. But a medical officer of health, in all questions involving the scope of Acts of Parliament, should act under the guidance of the legal adviser of the sanitary authority, bringing the questions first before the sanitary authority for submission to its clerk.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Rolleston, Oxford; Dr. Payne, London; Dr. Tate, Nottingham; Mr. Bullock, London; Dr. Dyce Duckworth, London; Dr. Ellery, Plympton; Mr. T. Bentham, Sutton Coldfield; Dr. Sansom, London; Mr. J. Wilders, Peterborough; Mr. Garnett, Glasgow; Mr. Griffin, Reading; Mr. Coates, Chippenham; Mr. Gabriel, Edinburgh; Mr. Lewis, Ross; Dr. Davidson, Liverpool; Mr. Minton, Bradford; Mr. Dowding, Cheam; Mr. R. Pearce, Burnley; Mr. Caudwell, Lincoln; Mr. J. Nunn, London; Mr. Hitchcock, London; Mr. Weale, Norwich; Mr. Bingham, Coventry; Mr. Cranford, Barnsley; Mr. Sobey, Hammersmith; Mr. Halford, Dudley; Mr. Evans, Bakewell; Mr. T. Craven, Worksop; Mr. J. Linfield, Romsey; Dr. Dale, Plymouth; Mr. Bourne, Hertford; Mr. Robson, Dundalk; Mr. Bennett, Bristol; Mr. Foster, Manchester; Mr. McAlister, Lancaster; Mr. Evans, Dursley; Mr. Roberts, Minster; Mr. Hughes, Liverpool; Mr. Walton, Evesham; Mr. Smith, Boston; Dr. Bond, Southampton; Mr. Brocklehurst, Barton-upon-Irwell; Mr. Waters, Coventry; Mr. Morton, Lincoln; Dr. Wilson, Glasgow; Mr. Halliday, Canterbury; Mr. Eastes, London; Mr. Turner, Watford; Miss Farquharson, Bath; Messrs. Weakley, Bigham; Mr. J. E. Richards, Hackney; Mr. Robinson, Westerham; Mr. Harrison, Walsall; Mr. Wilson, Barton; Mr. Bellamy, London; Mr. Lewis, London; Mr. Gourlay, Chelmsford; Dr. Dickson, London; Mr. Henry, Norwich; Mr. Murray, Bowden; Mr. W. Denton, Oakham; Mr. A. Mayne, Ryde; Mr. Mackay, London; Mr. Axham, London; Mr. G. Wilson, Portsmouth; Mr. Brown, Walton; Dr. S. Agnew, Lurgan; Mr. Wood, Brighton; Mr. R. Jeanes, Hayling Island; Mr. Wharton, Bridport; Dr. Fifield, Boston, U.S.; Mr. Squibb, Brooklyn, U.S.; Mr. Chappell, Whittlesea; Dr. Campbell, Carlisle; Dr. J. Burney Yeo, London; Mr. R. Atkins, Bromley; Mr. Thomas, Burton-on-Trent; Mr. Walter, Chorley; Mr. J. Gregory, Ross; Dr. Lester, Ashton; Mr. H. Arrowsmith, Darlington; Mr. Black, Colchester; Dr. Foss, Stockton; Mr. Walker, Spilsby; Mr. T. Homan, Tenby; Mr. W. Davies, Cardigan; Captain Acklom, Cheltenham; Mr. Robinson, Bridport; Mr. A. Macpherson, Middlesboro'; Mr. Henry, Whitehaven; Mr. Cayley, Dover; Mr. Sabine, London; Mr. Oldman, Spalding; Mr. Harding, Whittington Moor; Mr. Thomason, Bedford; Mr. J. H. Curran, Mansfield; Dr. Hutchison, Chipping Norton; Messrs. Sidney Leoni and Co., London; Mr. Walter, Manchester; Mr. W. Verrier, Birmingham; Messrs. Matthews, Bros., London; Mr. R. Weston, Carlisle; Dr. Mundy, Vienna; Mr. Turner, Leicester; Mr. Brown, Bridgewater; Mr. Brenton, Leighton; Dr. Cassell, Glasgow; Mr. Shedden, Cork; Mr. J. Wood, Nottingham; Mr. Ford, Carnarvon; Mr. Martin, Woodford; Hospital Surgeon; Alpha; A Country Surgeon; Justice; Deutsch, &c.

Warrington Guardian, Dover Telegraph, The Australasian, Durham County Advertiser, Oswestry Advertiser, Aberdeen Daily Free Press, Kentish Express, Irish Times, Southampton Times, and *Lincoln Gazette* have been received.